

# THE AMERICAN PSYCHOLOGIST

VOLUME 12



NUMBER 9

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THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.



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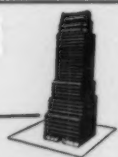
Written by one of the real experts in the field, this thorough text provides a general introductory coverage of the entire field of marketing research. After an orientation, it discusses the techniques of marketing research, the problem-solving process, the major elements in marketing research applications, and looks into its future. Numerous examples are based on actual practices of well-managed companies. Emphasis has been placed on sales analysis.

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# THE AMERICAN PSYCHOLOGIST

Journal of the American Psychological Association, Inc.

Volume 12

September, 1957

Number 9

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In addition to journals, the APA publishes a monthly *Employment Bulletin* and an annual biographical *Directory*.

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**Psychological Monographs: General and Applied.** Editor: NORMAN L. MUNN, Bowdoin College. Longer researches and laboratory studies which appear as units. Published at irregular intervals, about twenty issues per year. Subscription: \$8.00 per volume (Foreign, \$8.50). Single copies, price varies according to size.

**Psychological Review.** Editor: THEODORE M. NEWCOMB, University of Michigan. Original contributions of a theoretical nature. Bimonthly. Subscription: \$8.00 (Foreign \$8.50). Single copies, \$1.50.



# PROCEEDINGS OF THE THIRTY-SEVENTH ANNUAL MEETING OF THE WESTERN PSYCHOLOGICAL ASSOCIATION

DAVID L. COLE, Secretary-Treasurer  
*Occidental College*

THE Thirty-seventh Annual Meeting of the Western Psychological Association was held on the campus of the University of Oregon, Eugene, Oregon, on May 9-11, 1957. Two hundred twenty-four persons registered for the convention. The program included fifty-nine papers, five symposia, a coffee hour, a business meeting, and the presidential banquet. Business meetings were also held by the Oregon Psychological Association and the Washington State Psychological Association.

The Presidential Address by Joseph Gengerelli was entitled "On the Neural Events Underlying Classical and Operant Conditioning." In this paper, Dr. Gengerelli defended the proposition that the time had come for renewed neurological theorizing in the field of learning and that ultimately learning theory would rest on neurophysiological grounds.

The Program Committee was chaired by Richard Littman and included Lewis Aumack, Robert D. Boyd, Robert Fagot, Volney Faw, Robert Leary and N. D. Sundberg. The Local Arrangements Committee, headed by Norman Sundberg, included Victor Milstein, R. C. A. Moore, Alan Baron, J. B. MacQueen, E. Ray Lewis, R. V. Katter, and Kenneth Brookshire.

At the business meeting, the association accepted an invitation to hold the 1958 meeting at the U. S. Naval Postgraduate School, Monterey, California. The dates of the 1958 meeting will be April 24, 25, and 26. Dr. Francis Palmer accepted the position of Program Chairman for 1958. San Diego, California was selected as the site for the 1959 meeting.

Quinn McNemar of Stanford University was elected President-elect for the coming year. The President for 1958 is Leona E. Tyler.

## PROGRAM

### PAPER SESSIONS

#### Personality: Behavioral Prediction

EUGENE S. MILLS, *Whittier College*, Chairman

The relation of certain aspects of high school performance to academic success in college. VICTOR MILSTEIN AND J. SPENCER CARLSON, *University of Oregon*.

Vocational interest correlates of socioeconomic status in adolescence. JOHN PIERCE-JONES, *University of Texas*.

The relation of MMPI and Rorschach variables to different indices of teaching performance. DAVID L. COLE, *Occidental College*.

Are bright high school achievers "narrow uncreative conformists" as compared with low-achievers? WILLIAM R. MORROW, *Portland Public Schools* AND ROBERT C. WILSON, *Reed College*.

Subsequent army careers of effective and ineffective combat soldiers. JERALD N. WALKER, *HumRRO*.

#### Psychometrics

F. H. PALMER, *HumRRO*, Chairman

A probability analysis of criterion and racial effects in sociometric data. TOR MEELAND AND MITCHELL M. BERKUN, *HumRRO*.

An empirical demonstration of the comparability of factor structure when unities and communality estimates are placed in the diagonal cells of three cor-

relation matrices. WILLIAM B. MICHAEL, *University of Southern California* AND FRED TYLER, *University of California*.

Response bias in a test of driving attitudes. BRUCE DOUGLASS AND ROGER G. STEWART, *University of California*.

#### Clinical: Test Validation

WILLIAM B. SINGER, *VA Hospital, Vancouver, Washington*, Chairman

The effect of differential motivating instructions on the emotional tone and outcome of TAT stories. HARRIET C. SUMERWELL, MARY M. CAMPBELL AND IRWIN G. SARASON, *University of Washington*.

An exploratory study of concept formation on the Rorschach and Hanfmann-Kasanin tests. BEVERLY SONODA AND HENRY W. VON HOLT, JR., *University of Oregon*.

MMPI clinical scales derived from a new reference group. ALBERT ROSEN, *State College of Washington*.

A comparison of the Wechsler-Bellevue I and the Wechsler Adult Intelligence Scale. ROBERT E. RABOURN, *University of California*.

A comparison of several measures of psychosexual disturbance. ALEXANDER TOLOR, *USAF Hospital, Parks Air Force Base*.

Clinical data: too little or too much. H. T. MARTIN AND PAUL HOFFMAN, *State College of Washington*.

### Problem Solving and Thinking

- F. L. MARCUSE, *State College of Washington*, Chairman  
 An experiment on thought. W. A. S. SMITH, *University of Nevada* AND E. H. GALANTER, *Harvard University*.  
 The influence of problem variation on solution. HILTON M. BIALEK, *Claremont Men's College*.  
 The influence of cognitive dissonance on sequential decisions. RICHARD SNYDER AND CARL H. RITTENHOUSE, *U.S. Army Leadership Human Research Unit*.  
 Further tests of a model for thinking. JAMES B. MACQUEEN, *University of Oregon*.

### Learning

- J. S. ELDER, *State College of Washington*, Chairman  
 Shock motivated serial discrimination learning and the chemical block of autonomic impulses. JACK ARBIT, *U.S. Army Leadership Human Research Unit*.  
 Salt and food deprivation as motivation in learning with secondary reward. WAYNE B. HOLDER, JOSEPH R. MCCLINTIC, AND ELAINE E. HOLDER, *Fresno State College*.  
 The consummatory response and drive reduction. MONCRIEFF H. SMITH, JR. AND MICHAEL L. DUFFY, *University of Washington*.  
 Inverted preconditioning. A test of a conditioning interpretation. W. J. COPPOCK, *Oregon State College*.

### Clinical, General

- W. S. KOGAN, *VA Hospital, Seattle, Washington*, Chairman  
 Attempted change in attitudes, the Soulelem Scale of attitudes toward mental hospitals, and the F scale. TRACY CALDWELL AND NORMAN SUNDBERG, *University of Oregon*.  
 Interrelationships among individual difference variables, behavior in psychotherapy, and verbal conditioning. IRWIN G. SARASON, *University of Washington*.  
 Some theoretical implications of the conditioned response treatment of enuresis. HENRY D. SCHALOCK, *Oregon State College*.  
 Changes in "developmental ratings" of cerebral palsied children with and without pre-nursery school training. IRLA LEE ZIMMERMAN AND MARGARET H. JONES, *University of California, Los Angeles*.

### Learning

- P. L. HOFFMAN, *State College of Washington*, Chairman  
 The effect of lowering temperature on an operant striking response in fish. DONALD BUSHNESS AND JOHN V. HARALSON, *RAND and Los Angeles State College*.  
 The effects of food reward on puzzle performance by year-old rhesus monkeys. ROBERT R. RUEPING, *University of Oregon*.

Effects of guidance and task difficulty on learning to receive Morse code. HENRY L. ADAMS, *Human Factors Staff, Engineering Department, Convair, San Diego*.

The effects of success and failure experiences in altering dominance hierarchies of rhesus monkeys. ROBERT J. MARONEY, *University of Oregon*.

### Personality

- D. ADLER, *San Francisco State College*, Chairman  
 Personality traits of susceptible and unsusceptible hypnotic subjects. WARREN W. WILCOX, *Portland State College* AND VOLNEY FAW, *Lewis and Clark College*.  
 Common factors in attitudes associated with somatic symptoms. W. S. KOGAN, *VA Hospital, Seattle* and T. HOLMES AND T. DORPAT, *University of Washington Medical School*.  
 A factorial study of dogmatism and related concepts. BENJAMIN FRUCHTER, *University of Texas*, MILTON ROKEACH, *Michigan State University*, AND EDWIN G. NOVAK, *RAND*.  
 Child-rearing as a function of social class. RICHARD A. LITTMAN AND ROBERT C. A. MOORE, *University of Oregon*.  
 Direction of punitiveness and class symbols. J. D. ANDREWS, F. L. MARCUSE, AND P. J. HOFFMAN, *State College of Washington*.

### Animal Behavior—Fish Migration

- H. L. MANNING, *Oregon State College*, Chairman  
 The application of certain conditioning techniques to the problem of guiding young downstream migrant salmon. DONALD E. JOHNSON, *University of Washington*.  
 A comparison of the light gradient behavior of Blueback and Silver Salmon: normal and DNP-treated fingerlings. JAMES T. GOO AND F. D. KLOPPER, *State College of Washington*.  
 The effect of 2, 4 dinitrophenol on the downstream movement of Blueback Salmon. JAMES F. ADAMS AND F. D. KLOPPER, *State College of Washington*.  
 The effect of 2, 4 dinitrophenol on the temperature and salinity responses of Silver Salmon. PETER K. KIRCHNER AND F. D. KLOPPER, *State College of Washington*.

### Anxiety and Conflict

- DAVID M. STERNE, *VA Hospital, Vancouver, Washington*, Chairman  
 Anxiety and set strength as determinants of Einstellung rigidity. LEONARD I. SCHNEIDER, *State College of Washington*.  
 Behavior effects of treatments designed to produce experimental neurosis. JOHN M. WOODBURY, *State College of Washington*.

Factors in the recovery from approach-avoidance conflict. MITCHELL M. BERKUN, *HumRRO*.

Anxiety level, defense and preference, and performance under stress. ZANWIL SPERBER, *University of California, Los Angeles*.

### Perception and Motor Skills

L. SQUIRES, *Reed College*, Chairman

Effects of stimulation as measured by a noiseless, weightless, light-coupled ergograph. CHADWICK KARR, *University of Washington*.

Color vision in swine. RANDOLPH SEYMORE AND F. D. KLOPPER, *State College of Washington*.

The effect of reversal of field on the recognition of reversed words. SIDNEY S. CULBERT, *University of Washington*.

An investigation of the effect of taboo words on auditory subception. RODNEY LACKEY, *Occidental College*.

Control of prosthesis prehension force by arm amputees for light psychomotor tasks. JOHN LYMAN AND HILDE GROTH, *University of California, Los Angeles*.

An assessment of prehension force as a measure of effort in manipulative skills. HILDE GROTH, *University of California, Los Angeles*.

### Social Psychology

WILLIAM R. MORROW, *Portland Public Schools*,  
Chairman

Group-insight and self-insight of high status group members. DAPHNE E. BUGENTAL AND GEORGE F. J. LEHNER, *University of California, Los Angeles*.

Rationale and results in a preference approach to housing design. F. D. KLOPPER, ANNA L. WOOD, AND ADREEN NICHOLS, *State College of Washington*.

Personality and attitude structure of prisoners. GERALD J. MCCARTY, *Seattle University*.

Reality and self-protection as determinants of classroom expectations. R. W. LEARY, *University of Oregon*.

### Applied

P. SECORD, *University of Nevada*, Chairman

Relationships among leader effectiveness ratings, intelligence, and job knowledge. VINCENT CAMPBELL, CARL J. LANGE, AND FRED J. SHANLEY, *HumRRO*.

tetrachoric in 2 minutes with *N* of 300. JOSEPH FINK, *Rand Corporation* AND SPENCER CARLSON, *University of Oregon*.

A study of the relationship between age, speed and accuracy, intelligence level, several other aptitudes and job success of federal material dispatcher employees. MARIO LEVI AND ESTHER LA RUE, *Installation-McClellan Air Force Base, California*.

The dimensions of cancer knowledge of dental students.

PETER G. LORET AND RICHARD B. WEST, *University of California School of Medicine*, AND WILLIAM B. MICHAEL, *University of Southern California*.

Reported driving speeds and opinions on speed and traffic law enforcement. ROGER G. STEWART, *University of California, Los Angeles*.

### SYMPOSIA

#### Current Experimental Research on Child Behavior

SIDNEY W. BIJOU, *University of Washington*, Chairman

W. E. JEFFREY, *University of California, Los Angeles*.

YVONNE BRACKBILL, *San Jose State College*.

ROBERT P. SHARPLY, *University of Washington*.

PERSIS T. STURGIS, *University of Washington*.

#### Current Research Problems

R. W. LEARY, *University of Oregon*, Chairman

PAUL DEMPSEY, *University of California at Davis*.

ZANWIL SPERBER, *University of California, Los Angeles*.

PAUL E. FIELDS, *University of Washington*.

HARRY A. SHOEMAKER, *State College of Washington*.

#### Interpersonal Perception

P. F. SECORD, *University of Nevada*, Chairman

ALLAN KATCHER, *Rand Corporation*.

GEORGE LEAVITT, *Fresno State College*.

E. PAUL TORRANCE, *AFPTRC, Reno*.

PAUL F. SECORD, *University of Nevada*.

A. S. LUCHINS AND N. D. SUNDBERG, *University of Oregon*.

#### Secondary Reinforcement

RICHARD A. LITTMAN, *University of Oregon*, Chairman

D. E. BERLYNE, *University of Aberdeen, Scotland*.

R. W. LEEPER, *University of Oregon*.

#### Criteria Problems in Studies of Organizational Effectiveness and Leadership

FRANCIS H. PALMER, *HumRRO*, Chairman

THOMAS HARRELL, *Stanford University*.

PAUL TORRANCE, *AFPTRC, Reno, Nevada*.

LAWRENCE ALEXANDER, *Rand Corporation*.

CARL LANGE, *HumRRO*.

### SPECIAL MEETINGS

Washington State Psychological Association business meeting.

Oregon Psychological Association business meeting.

Western Psychological Association Annual Business Meeting.

Presidential Address: On the Neural Events Underlying Classical and Operant Conditioning. JOSEPH A. GINGERELLI.



# PROCEEDINGS OF THE TWENTY-NINTH ANNUAL MEETING OF THE MIDWESTERN PSYCHO- LOGICAL ASSOCIATION

DONALD W. FISKE, Secretary-Treasurer

*University of Chicago*

THE Midwestern Psychological Association held its Twenty-ninth Annual Meeting at the Hotel Sherman, Chicago, on May 2-4, 1957, with 1,220 persons registered. The program consisted of 117 papers, 10 symposia, and 3 seminars.

The Presidential Address, "Of Models and Men," was delivered by William K. Estes of Indiana University.

The Program Committee consisted of C. H. Lawshe, Chairman, Melvin Marx, Alexander Buchwald, and Donald W. Fiske. The Local Arrangements Committee included George Speer, Chairman, Joe Kamiya, Kenneth Isaacs, Bernard Gold, Robert McFarland, Leonard Diamond, Ledford Bischof, William C. Krathwohl, and Loren Chapman. Roderick Bare and Michael Amrine of the APA Central Office assisted with placement and public information respectively. Delos D. Wickens was elected president and Cletus J. Burke was elected to the Council. Continuing members of the Council are C. H. Lawshe and I. E. Farber.

The following persons were elected to life membership: F. P. Buller, Homer L. J. Carter, Ida B. Kelley, P. L. Mellenbruch, Samuel Renshaw, C. N. Rexroad, and Melvin G. Rigg. The business meeting accepted 268 new members, bringing the total membership to 2,082.

According to the standing practice of the association, any APA member may automatically become a member of MPA by submitting his dues payment (\$1.25 for one year; \$3.00 for three years) to the Secretary-Treasurer. Persons joining under this provision prior to the 1958 program deadline may submit papers.

The following 200 APA members became MPA members during the year ending April 1:

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Wayne P. Anderson  
E. J. Asher, Jr.  
Harvey Austrin  
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Mary A. Boltuck  
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Michael Branzovich  
Boris Breiger  
Hubert Brogden  
Mortimer Brown  
John Bucklew  
V. Ralph Buzzota  
Robert Callis  
Gloria L. Carey  
Esther A. Cedarstaff  
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William A. Mason  
William E. Martin  
Claude Mathis  
Mae Matthisen  
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C. Scott Moss  
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Eugene B. Nadler  
John E. Nangle  
John M. Newton  
Robert C. Nichols  
William H. Nichols  
Delmer C. Nicks  
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Catherine Patrick  
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Leonard M. Seale  
Regine Seidler  
John Shand

Helen E. Shimota  
 Frank Robert Shoaf  
 Emir H. Shuford, Jr.  
 Louis M. Smith  
 Mark W. Stephens  
 Pairlee June Stinson  
 Jeannette E. Stanton  
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John Vanderberg  
 Thomas J. Waters  
 Lelon A. Weaver, Jr.  
 George D. Weigel  
 Henry H. Weiss  
 Paul R. Wendt  
 Jack Werboff  
 Rita J. Wetzel  
 Milton Whitcomb  
 William J. White  
 Kingsley M. Wientge  
 J. Clifton Williams  
 Allen Willner  
 James R. Wilson  
 Joseph Wolf  
 Greydon M. Worbois  
 John J. Wright  
 Rita R. Wurzel  
 Bernard Yadoff  
 Robert B. Zajonc

The following 63 applicants were elected to membership:

Bertram B. Adams  
 Harry L. Ammerman  
 Gilles Auclair  
 Robert Beck

Robert E. Blanchard  
 Alex J. Cade  
 John Champion  
 Ernest Clark

Donald Drewes  
 Earl K. Dryden  
 Andrew J. DuBrin  
 Robert Dunlop  
 Paul Ellen  
 Harold W. Faeth, Jr.  
 Leona M. Gambell  
 Loraze Garafolo  
 Dorothy J. Gates  
 Sheila Ginsberg  
 Isidore Gormezano  
 Ronald K. Green  
 Howard Grossman  
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 Leonard E. Jarrard  
 Walter R. Jones  
 Rudolph Kagerer  
 George Karas  
 Paul Kjeldergaard  
 Edwin Krauser  
 Anna M. Larson  
 George W. Lewis  
 Langdon Longstreth  
 Norman A. Lyford  
 Albert J. Macek  
 Charles Margolis

James D. Miller  
 Henry Minton  
 Billy Modisette  
 Richard Moren  
 Paul Olson  
 Reginald A. Orsolini  
 Paul J. Patinka  
 James Patterson  
 Malcolm M. Purdy  
 Robert T. Queen  
 Lenore S. Radloff  
 Roland Radloff  
 Andrew Radkins  
 Carolyn Riley  
 Leon A. Rosenberg  
 Joseph Rychlak  
 Jerome D. Schein  
 Marvin Schneider  
 Stanley E. Schroth  
 Basil J. Sherlock  
 Adrienne Smith  
 Robert J. Teare  
 Keith B. Tombrink  
 Harold Thorgersen  
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 Prentice von Conrad  
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## PROGRAM

Abstracts of papers have been deposited with the ADI Auxiliary Publications Project, Photoduplication Service, Library of Congress, Washington 25, D. C., as Documents No. 5232-5254. When ordering, remit the price listed below for photoprints or 35 mm. microfilm, using check or money order payable to: Chief, Photoduplication Service, Library of Congress. Advance payment is required.

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Child Development	5251	\$1.75	\$2.50
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Human Conditioning	5253	\$1.75	\$2.50
Behavioral Effects of Tranquilizer Drugs	5254	\$1.75	\$2.50

## PAPER SESSIONS

### Clinical Psychology

LEON LEVY, *Indiana University*, Chairman

WILBERT J. MUELLER, *Hutchinson Public Schools*, AND  
 E. GORDON COLLISTER, *University of Kansas*. A study of adolescent adjustment using Shaffer's postulates as a model.

LEE B. SECHREST, *Pennsylvania State University*, AND  
 BENJAMIN BARGER, *Columbus Receiving Hospital*. The significance of verbal participation in group psychotherapy.

NORMA LEVENFELD SADWICK, *Bureau of Child Study*. A study of the relationship between personality changes and language changes in aphasic patients.

BERNARD S. AARONSON, *New Castle State Hospital*. The influence of seizure perception on seizure occurrence.

### Industrial Psychology

ANDREW D. MCGINLEY, *General Motors Institute*,  
 Chairman

ROBERT D. KELLY, *A. T. Kearney and Company*. The development of a personnel rating technique through the analysis of "work performance incidents."

- CHARLES R. GROSS, *Michigan State University*, AND  
GREYDON M. WORBOIS, *Detroit Edison Company*.  
An observational analysis of supervisory behavior.  
DONALD C. KING, *Purdue University*. A factor analysis of employees' attitudes toward their company.

### Animal Motivation and Learning

- JAMES DINSMOOR, *Indiana University*, Chairman  
EMIR H. SHUFORD, JR., *AFPTRC, Lackland Air Force Base*. Acceptability and osmotic pressure as determinants of the intake of glucose and sucrose solutions.  
ARNOLD FREEDMAN, *Veterans Administration, Chicago*, AND J. McV. HUNT, *University of Illinois*. Drive conditioning in water deprivation.  
ROBERT W. EARL AND NOEL PARADISE, *University of Michigan*, AND WILLIAM N. DEMBER, *Yale University*. Response by rats to differential stimulus complexity.  
G. ROBERT GRICE AND JOHN D. DAVIS, *University of Illinois*. Effect of irrelevant thirst motivation on a response learned with food reward.  
JAMES A. DYAL, *University of Illinois*. Response strength as a function of the apparent size of the incentive.

### Sensation and Perception

- A. LEONARD DIAMOND, *Northwestern University*,  
Chairman  
EDWARD L. HOLSHOUSER, *Carnegie Institute of Technology*. Peripheral visual acuity as a function of contrast, duration, and meridian.  
JAN H. BRUELL, *Western Reserve University*. Head tilt compensating for apparent tilt of after-images and space perceptual constancy.  
ARNOLD BINDER AND SOLOMON E. FELDMAN, *Indiana University*. Responses to ambiguous stimuli as functions of learning experiences.  
JAMES M. VANDERPLAS AND EVERETT A. GARVIN, *Washington University*. The association value of random shapes.  
B. H. DEATHERAGE AND D. H. ELDREDGE, *Central Institute for the Deaf*. Remote masking in selected frequency regions.  
ROBERT C. BILGER AND IRA J. HIRSH, *Central Institute for the Deaf*. An invariant measure of intensity for remote masking.  
ROBERT H. WRIGHT, *Purdue University*. The relation of odor to the low Raman spectrum.  
EVELYN SANFORD AND HERSCHEL LEIBOWITZ, *University of Wisconsin*. Spacing and amount of intermittent illumination as variables in the perception of shape.

### Human Learning I

- DELOS D. WICKENS, *Ohio State University*, Chairman  
ROBERT E. MORIN, *Iowa State College*, AND ROBERT SOSNICK, *University of Texas*. The role of irrelevant stimulus variation in discrimination learning.  
WARD EDWARDS, *AFPTRC, Lackland Air Force Base*. The effect of misinformation on concept formation.  
ALEC J. SLIVINSKE AND JOHN F. HALL, *Pennsylvania State University*. The role of stimulus discriminability in stimulus generalization.  
SLATER E. NEWMAN AND ELI SALTZ, *AFPTRC, Lowry Air Force Base*. Isolation effects: stimulus and response generalization as explanatory concepts.  
ANDREW CHENZOFF AND LEE W. GREGG, *Carnegie Institute of Technology*. Instructional versus physical simplification of a concept formation task.

### Human Learning II

- RICHARD N. BERRY, *Indiana University*, Chairman  
C. E. NOBLE, W. T. ALCOCK, F. J. FARESE, AND J. L. NOBLE, *Louisiana State University*. The prediction of trial-and-error learning by printed and apparatus tests.  
EDITH D. NEIMARK, *AFPTRC, Lackland Air Force Base*. Identification-problem solution in relation to alternative solutions and type of information presented.  
ROBERT S. BEECROFT AND ROBERT ANNESER, *HRRO, George Washington University*. The effectiveness of increased repetitions in classroom learning.  
WILLIAM H. JAMES AND JULIAN B. ROTTER, *Ohio State University*. Partial and one-hundred percent reinforcement under chance and skill conditions.

### Leadership and Group Behavior

- FRED E. FIEDLER, *University of Illinois*, Chairman  
MILTON E. ROSENBAUM, *University of North Carolina*. Social perception and the motivational structure of interpersonal relations.  
E. P. HOLLANDER, *Carnegie Institute of Technology*. Group expectancies and leadership status.  
HARRY P. SHELLEY, *University of Nebraska*. Status consensus and satisfaction with the group.  
SEYMOUR ROSENBERG, *AFPTRC, Lackland Air Force Base*, AND THORNTON B. ROBY, *Tufts University*. Experimental assembly of aircrews by self-selection procedures: a validation of the method.  
ROBERT L. HALL, *AFPTRC, Lackland Air Force Base*. Team performance under feedback that confounds responses of individual team members.



**Animal Discrimination**

ALLEN CALVIN, *Hollins College*, Chairman

- R. W. LEARY, *University of Oregon*. The effect of amount of reward on serial discrimination learning of rhesus monkeys.
- GIRARD W. LEVY, *Georgia State College of Business Administration*. Successive discrimination learning under partial reinforcement.
- WERNER K. HONIG, *Duke University*. Prediction of preference, transposition, and transposition-reversal from the generalization gradient.
- HARLEY M. HANSON, *Duke University*. Generalization after discrimination training with a positive stimulus intermediate between two negatives.
- JAMES R. ISON AND WILLIAM HAYS, *University of Michigan*. Responses to specific stimulus dimensions in discrimination learning.

**Personality**

RALPH W. HEINE, *University of Chicago*, Chairman

- HAROLD J. MANDL, *Kansas Treatment Center for Children*. Perceptual defense, task requirements, and emotional content.
- LEONARD BERKOWITZ, *University of Wisconsin*. Leveling tendencies and the complexity-simplicity dimension of personality.
- HOWARD F. SCHUTZ AND JOE KAMENETZKY, *Quartermaster Food and Container Institute for the Armed Forces*. Temperament correlates of food preference and rejection.
- JOHN B. TIMBERLAKE AND MORRIS I. STEIN, *University of Chicago*. Self-actualization, creativity and value structure.
- EVA D. FERGUSON, *University of Pittsburgh*. The effect of sibling competition and alliance on level of aspiration, expectation, and performance.
- ABRAM M. BARCH AND JOHN NANGLE, *Michigan State University*. Social setting and conformity to a legal requirement.
- DON A. TRUMBO, MILTON ROKEACH, AND LEO GLADIN, *Michigan State University*. A validation study with high and low dogmatic groups.
- H. EDWIN TITUS AND H. W. KARN, *Carnegie Institute of Technology*. A study of the behavioral validity of the California F scale.

**Anxiety**

HOWARD F. HUNT, *University of Chicago*, Chairman

- I. E. FARBER, KENNETH W. SPENCE, AND HAROLD P. BECHTOLDT, *State University of Iowa*. Emotionality, introversion-extraversion, and conditioning.

CHARLES J. VAUGHAN, *Montefiore Hospital*, AND A. W. BENDIG, *University of Pittsburgh*. Manifest anxiety, discrimination learning, and transposition behavior.

CHARLES D. SPIELBERGER, *Duke University*. On the relationship between anxiety and intelligence.

ROBERT E. FAGER AND IRWIN J. KNOPF, *State University of Iowa*. Probability estimations and their relationship to stimulus generalization and manifest anxiety.

F. J. MCGUIGAN, ALLEN D. CALVIN AND ELIZABETH C. RICHARDSON, *Hollins College*. Manifest anxiety, palmar perspiration index, and stylus maze learning.

JACK G. WIGGINS, *Cleveland Receiving Hospital*. Multiple solution anagram-solving as an index of anxiety.

**Animal Learning**

G. ROBERT GRICE, *University of Illinois*, Chairman

EUGENE WINOGRAD AND JAMES A. DINSMOOR, *Indiana University*. Bar holding as a preparatory response in escape-from-shock training.

FREDERICK P. GAULT, *Indiana University*. Acquisition and extinction of a "traumatic" and "non-traumatic" avoidance response.

LEON A. WEAVER, JR., *Purdue University*. The formation of learning set in the hooded rat.

GLEN D. JENSEN AND DONALD J. LEWIS, *Northwestern University*. Re-extinction after differential extinction procedures.

MAURICE SISKEL, JR., *University of Nebraska*, AND GEORGE COLLIER, *University of Missouri*. Performance as a joint function of amount of reward and inter-reward interval.

JOHN T. CARMODY AND DONALD W. LAUER, *Indiana University*, AND SOLOMON WEINSTOCK, *Lehigh University*. Some variables affecting the rate and course of extinction of a running habit.

DONALD W. ZIMMERMAN AND O. H. MOWRER, *University of Illinois*. A method for obtaining longer-lasting secondary reinforcement.

**Physiological Psychology**

R. C. DAVIS, *Indiana University*, Chairman

LEONARD E. JARRARD, *Carnegie Institute of Technology*. Changes in muscle action potentials with prolonged work.

RICHARD N. BERRY, *Indiana University*. The relation of the magnitude of the QRS complex to rote learning.

B. PAUL H. POSCHEL, *University of Illinois*. Effect of electroconvulsive shock on active and inhibited approach-avoidance conflict.

ALAN E. FISHER, *University of Wisconsin*. Behavioral effects of brain chemical stimulation in the rat.

GARTH J. THOMAS, *University of Illinois College of Medicine*. Effects of rhinencephalic lesions on conditioning of avoidance responses in rats.

ROBERT Y. MOORE AND IRVING T. DIAMOND, *University of Chicago*. The effect of hippocampal ablation on conditioned avoidance behavior in the cat.

K. E. MOYER, *Carnegie Institute of Technology*. Effect of adrenalectomy on an escape response in the rat.

### Verbal Learning

BENTON J. UNDERWOOD, *Northwestern University*,  
Chairman

HAROLD W. HAKE, *University of Illinois*. Memory for order of occurrence of events as measured by serial anticipation learning.

LYOYD R. PETERSON AND MARGARET JEAN PETERSON, *Indiana University*. Labels and rate of presentation.

NORMA C. FREDENBURG, *AFPTRC, Lackland Air Force Base*. Associative interference in verbal paired-associates learning.

LAWRENCE M. STOLUROW, *AFPTRC, Chanute Air Force Base*, AND BRUCE O. BERGUM, *University of Illinois*. Learning diagnostic information—effects of direction of association and of prose vs. paired associates presentation.

JAMES N. JOYCE, *Coe College*. Verbalization as a cue in learning and extinction.

### Measurement and Statistics

JANE LOEVINGER, *Jewish Hospital of St. Louis*,  
Chairman

ROBERT M. GUION, *Bowling Green State University*, AND GEORGE LEE BOURASSA, *General Electric Company*. A factor analysis of dexterity and vision tests.

ROBERT GLASER, *University of Pittsburgh*, AND MURRAY GLANZER, *American Institute for Research*. A comparison of cross-sectional and longitudinal results in a study of age-related changes.

ROBERT E. KRUG, *Carnegie Institute of Technology*. The effect of specific selection sets on a forced choice self-description inventory.

PAUL M. KJELDERGAARD AND JAMES J. JENKINS, *University of Minnesota*. A study of the influence of verbal stimuli on personality ratings.

PHILIP H. DUBOIS, *Washington University*. Multiple correlation by reduction of criterion variance.

### Engineering Psychology

JAMES JENKINS, *University of Minnesota*, Chairman

LEWIS E. AUKES AND GEORGE B. SIMON, *AFPTRC, Chanute Air Force Base*. The relative effectiveness of a training device when used intact versus with isolated parts.

DONALD N. ELLIOTT AND WILLIAM PEREPELUK, *Wayne State University*. Rate of flicker and warning light effectiveness.

JEROME COHEN AND ALBERT DINNERSTEIN, *Antioch College*. Flash rate as a coding dimension for the visual presentation of information.

JEROME S. LUKASZEWSKI AND ROBERT L. MCCORNACK, *Wayne State University*. The effect of muscular tension on adjustment time.

MICHAEL HUMPHRIES, *Defence Research Medical Laboratories, Toronto*. A model for predicting the relative difficulty of four control-display relationships for three positions of the operator and two positions of the control.

### Motor Learning I

JACK A. ADAMS, *University of Illinois*, Chairman

ROBERT SEIBEL, *AFPTRC, Lackland Air Force Base*. Advanced proficiency on a complex psychomotor task, and measures derived from performance early in training.

RANDALL M. CHAMBERS AND DAVID L. CLARK, *AFPTRC, Lackland Air Force Base*. Effects of velocity-control training variations on skill learning and performance composition.

ALBERT J. MACEK AND DON LEWIS, *State University of Iowa*. Temporary and persisting components of total work decrement.

GUY H. MILES, *State University of Iowa*. Drive level and habitual modes of task approach as factors affecting transfer on a complex motor task.

### Comparative Psychology I

KENNETH M. MICHELS, *Purdue University*, Chairman

NORMAN M. GINSBURG, *University of Illinois*. Conditioned vocalization in the Budgerigar.

LEON S. OTIS, *State University of Iowa*, AND JEAN A. CERF, *University of California Medical Center*. Classical and instrumental conditioning of emotional responses in goldfish.

F. T. CRAWFORD, *Georgia State College*. Discrimination reversal to spatial cues by monkeys.

ROBERT R. ZIMMERMANN AND HARRY F. HARLOW, *University of Wisconsin*. Nonspatial discrimination learning in the neonatal rhesus monkey.

- H. PHILIP ZEIGLER, *University of Wisconsin*. A methodological study of shape constancy in the rhesus monkey.

### Comparative Psychology II

- DONALD R. MEYER, *Ohio State University*, Chairman  
 LOUIS AARONS AND AUSTIN H. RIESEN, *University of Chicago*. Visual intensity discriminations in cats after early visual form deprivation.  
 HAROLD THORGERSEN, *Purdue University*. Tactile discrimination in the raccoon.  
 KENNETH M. MICHELS, *Purdue University*. The performance of raccoons on patterned string problems.  
 JOHN I. JOHNSON, JR., *Purdue University*. Visual discrimination learning by raccoons: effect of object size and learning set.

### Motor Learning II

- CARL P. DUNCAN, *Northwestern University*, Chairman  
 WILLIAM F. LOWE, *Human Factors Division, Kirtland Air Force Base*. The effects of shifts in practice conditions on psychomotor performance.  
 DANIEL S. LORDAHL AND E. JAMES ARCHER, *University of Wisconsin*. Transfer effects on a rotary pursuit task as a function of first-task difficulty.  
 JOHN C. JAHNKE, *Indiana University, Southeastern Center*. Warm-up in motor learning as a function of degree of learning and length of interpolated rest.  
 HARRY P. BAHRICK, *Ohio Wesleyan University*, AND PAUL M. FITTS AND GEORGE E. BRIGGS, *Ohio State University*. Learning curves, facts or artifacts?

### Child Development

- DONALD BRIELAND, *Elizabeth McCormick Memorial Fund*, Chairman  
 ROBERT L. FANTZ, *Western Reserve University*. Pattern vision in young infants.  
 LEWIS P. LIPSITT AND ALFRED CASTANEDA, *State University of Iowa*. A report of a self-concept scale for children and its relationship to the Children's Manifest Anxiety Scale.  
 DAVID B. LYNN, *Indiana University Medical Center*. Father-absence and personality development of children in Norwegian sailor families.  
 SIDNEY ROSEN, LOIS HOFFMAN AND RONALD LIPPITT, *University of Michigan*. Some effects of role reversal between parents in their relations with children.  
 EUGENE S. GOLLIN, *University of Minnesota*. Organizational characteristics of social judgment.  
 PETER F. BRIGGS AND ROBERT D. WIRT, *University of Minnesota*. Social agency contact and subsequent delinquency.

### Mathematical Models and Learning

- EDWARD WALKER, *University of Michigan*, Chairman  
 R. C. ATKINSON AND PATRICK SUPPES, *Stanford University*. An analysis of two-person games in terms of learning theory.  
 TERESA S. CARTERETTE, *Indiana University*. Terminal probability of a position response as related to three correction procedures.  
 GILBERT R. JOHNS AND MARCIA D. JOHNS, *Indiana University*. Effect of a secondary reinforcer on conditioning and extinction of prediction behavior in a two-choice situation.  
 R. ALLEN GARDNER, *U. S. Army Medical Research Laboratory, Fort Knox*. Probability learning with two and three choices.  
 ARTHUR L. BRODY, *Indiana University, Kokomo Extension*. Learning under two concurrent partial reinforcement schedules.

### Human Conditioning

- JANET TAYLOR, *Northwestern University*, Chairman  
 WILLIAM F. PROKASY, JR., *University of Wisconsin*. Extinction and spontaneous recovery of conditioned eyelid responses as a function of varying amounts of acquisition and extinction training.  
 WILLIAM F. REYNOLDS, *Western Michigan College*. Acquisition and extinction of the conditioned eyelid response following partial and continuous reinforcement schedules.  
 M. GORDON HOWAT, *University of Wisconsin*. Influence of inter-trial interval during extinction on 20-minute spontaneous recovery of the conditioned eyelid response.  
 CHARLES B. TRUAX, *University of Wisconsin*. Acquisition and extinction of the conditioned eyelid response as a function of instructions during hypnosis.

### Behavioral Effects of Tranquilizer Drugs

- IRVING T. DIAMOND, *University of Chicago*, Chairman  
 WILLIAM MALONEY AND HAROLD COPPOCK, *New Mexico Highlands University*. Interference with emotional reinforcement as an effect of sub-anesthetic and ataraxic drugs in shock-escape training.  
 ARTHUR J. RIOPELLE, *Emory University*. Effects of reserpine on performance in complex tasks by normal and brain-operated monkeys.  
 GEORGE WILLIAM LEWIS, *Purdue University*. Effects of chlorpromazine on the conditioned avoidance response in the rat.  
 JOHN A. HARVEY AND HOWARD F. HUNT, *University of Chicago*. Some effects of meprobamate on a conditioned emotional response.



## SYMPOSIA

**Theoretical Interpretations of Runway Studies of Partial Reinforcement**

D. W. LAUER, *Indiana University*, Chairman

The discrimination hypothesis. D. W. TYLER, *University of Missouri*.

Contiguity interpretations. SOLOMON WEINSTOCK, *Lehigh University*.

Frustration factors. ABRAM AMSEL, *Tulane University*.

**Psychological Effects of Cerebral Lesions in Human Beings**

RALPH M. REITAN, *Indiana University Medical Center*, Chairman

Psychological test performance and lateral localization of cerebral lesions. ALFRED B. HEILBRUN, JR., *State University of Iowa*.

Methods relative to lateralization and regional localization of cerebral lesions. HALLGRIM KLØVE, *Indiana University Medical Center*.

Differential patterns of results in lateralized and localized cerebral lesions. RALPH M. REITAN, *Indiana University Medical Center*.

Measurement of higher brain functions. WARD C. HALSTEAD, *University of Chicago*.

**A Critical Evaluation of the Effectiveness of the Team Approach in Psychiatric Outpatient Clinics**

RICHARD WALLEN, *Creelman Associates*, Chairman

A critical evaluation. ERNA SCHWERIN, *Northwest Guidance Center*.

A positive evaluation. VINCENT O'CONNELL, *Columbus Psychiatric Clinic*.

A proposed research study. B. G. ROSENBERG, *Bowling Green State University*.

Discussant: JOHN PEARSON, *Department of Public Welfare, Rochester, Minn.*

**The Development of Processes for Indirect or Synthetic Validity**

MICHAEL J. BALMA, *General Electric Company*, Chairman

The generalization of validity. EDWIN E. GHISELLI, *University of California*.

Experiences in the development of objective job-analysis methods. ERNEST J. MCCORMICK, *Purdue University*.

Empirical validations of the J-Coefficient. ERNEST PRIMOFF, *U. S. Civil Service Commission, Washington, D. C.*

Application of motion-and-time analysis to dexterity tests. CHARLES H. GRIFFIN, *General Electric Company*.

**Psychology as a Basic Science in Medical Education**

MILTON J. HOROWITZ, *Western Reserve University*, Chairman

Preclinical and clinical teaching. ALAN K. ROSENWALD, *University of Illinois College of Medicine*.

Problems in teaching psychology as basic science. RALPH W. HEINE, *University of Chicago Medical School*.

Experiences in teaching psychology as basic science. VIN ROSENTHAL, *Northwestern University Medical School*.

Discussants: GEORGE YACORZYNSKI, *Northwestern University Medical School*, AND C. KNIGHT ALDRICH, *Department of Psychiatry, University of Chicago Medical School*.

**Challenges and Accomplishments of Management Development in Business and Industry from the Viewpoints of:**

MAX M. FORSTER, *International Minerals and Chemical Corporation*, Chairman

Industry—Staff Specialist. EDWARD R. HENRY, *Standard Oil Company of New Jersey*.

University Executive Program. LEON A. BOSCH, *Institute for Management, Northwestern University*.

Professional Consultant. WALTER R. MAHLER, *Mahler and Associates*.

American Management Association. GEORGE ODIORNE, *Personnel Division, American Management Association*.

National Training Laboratory. LELAND P. BRADFORD, *National Educational Association*.

Industry—Management. CHARLES W. FOREMAN, *United Parcel Service*.

**Stimulus Satiation**

EDWARD L. WALKER, *University of Michigan*, Chairman

Curiosity, exploratory drive, and stimulus satiation. MURRAY GLANZER, *American Institute for Research*.

Action decrement and its relation to learning. EDWARD L. WALKER, *University of Michigan*.

A discrimination analysis of alternation phenomena. MAX S. SCHOEFFLER, *University of Michigan*.

Learning through stimulus satiation. M. RAY DENNY, *Michigan State University*.

**Evaluating Psychotherapy**

EUGENE E. LEVITT, *Illinois Institute for Juvenile Research*, Chairman

Methodological considerations in evaluating therapy.

DESMOND S. CARTWRIGHT, *University of Chicago*.

The therapist as an index of outcome of therapy. J. McV. HUNT, *University of Illinois*.

The use of the interaction chronograph in evaluating therapy. IVAN N. MENSCH, *Washington University School of Medicine*.

The results of the IJR study of outcome of child therapy. EUGENE E. LEVITT, *Illinois Institute for Juvenile Research*.

**The Acquisition and Transfer of Skills**

DON LEWIS, *State University of Iowa*, Chairman

The effects of verbal pretraining on the performance of discriminative motor tasks. DOROTHY E. MCALLISTER, *Syracuse University*, AND JOAN H. CANTOR, *George Peabody College*.

Habitual modes of responding as facilitators and retarders of skill acquisition. ALFRED H. SHEPHARD, *University of Toronto*.

The similarity problem in positive transfer. GEORGE E. BRIGGS, *Ohio State University*.

Discussants: JACK A. ADAMS, *University of Illinois*, BURTON G. ANDREAS, *University of Rochester*,

KATHERINE E. BAKER, *University of Nebraska*, AND CHARLES C. SPIKER, *State University of Iowa*.

**Industrial Morale**

ROBERT M. GUION, *Bowling Green State University*, Chairman

The problems of terminology. ROBERT M. GUION, *Bowling Green State University*.

Motivational aspects of morale. ROSS STAGNER, *University of Illinois*.

Measurement of morale. RAYMOND A. KATZELL, *Richardson, Bellows, Henry & Company*.

Factor analysis of morale data. ROBERT J. WHERRY, *Ohio State University*.

Following through on morale studies. GREYDON WORBOIS, *Detroit Edison Company*.

**SEMINARS****Perceptual-Motor Performance**

PAUL M. FITTS, *IBM Research Laboratory*, Chairman

**The Problem of the Paper-Pushing Prison Psychologist**

SHELDON B. PEIZER, *Ohio State Reformatory*, Chairman

**Gestalt Therapy: Theory and Applications**

BILL J. BARKLEY, *Cleveland*, Chairman

# PROCEEDINGS OF THE TWENTY-EIGHTH ANNUAL MEETING OF THE EASTERN PSYCHOLOGICAL ASSOCIATION

GORHAM LANE, Secretary

University of Delaware

THE Twenty-eighth Annual Meeting of the Eastern Psychological Association was held on April 12 and 13, 1957 at the Hotel Statler in New York City. Approximately 2,300 persons registered at the meetings. Of these, 1,458 were members of the association, 522 were guests, and 320 were new members who joined the association at the meetings. The present active membership of the association totals 3,084.

Joseph M. Notterman was in charge of local arrangements for the meetings. He was assisted by Jack A. Vernon, Harold M. Schroder, Henry M. Parsons, Mrs. Aleeza Beare, and August A. Fink. The Program Committee, consisting of James Deese, Chairman, and Malcolm G. Preston, scheduled 195 papers (presented in 28 sessions), 1 symposium, 7 special meetings, 3 invited addresses, and a special showing of films by McGraw-Hill. Fred S. Keller presented the annual Presidential Address entitled "The Phantom Plateau."

Among the significant items transacted at the Annual Business Meeting and at the Board of Directors' meeting were the following:

1. Stuart W. Cook was elected President (1957-58), and Lorrin Riggs and E. Joseph Shoben, Jr. were elected to the Board of Directors (1957-60).

2. The following appointments were made: Committee on Local Arrangements, Harold M. Schroder, Chairman, and Eliot Stellar; Program Committee, John Lanzetta, Chairman, to serve with James Deese; Membership Committee, Thomas Reese to serve with David Zeaman, Chairman; Elections Committee, Mrs. Tracy Kendler to serve with Fred S. Keller; Auditing Committee, Albert Pepitone and Norman O. Frederiksen; and Representative to AAAS Council, Murray Sidman to serve with Howard H. Kendler.

3. The report of the Secretary, having been dis-

tributed to the board members prior to the meetings, was approved.

4. The following changes in By-laws were approved by the membership: (a) an amendment to Article IX: "The Board of Directors may recommend at the Annual Meeting, for the approval of the membership, any changes in the amount of dues and guest fees for the next following fiscal year"; and (b) a change in Article XI: "By-laws or amendments to By-laws may also be adopted by mail ballot. In this case, the Secretary will send by first class mail a copy of the proposed changes to the last known address of each Member and establish a suitable deadline (not less than thirty days) for the return of ballots. Changes will be adopted if two-thirds of the Members responding are in favor of the proposed changes."

5. On the recommendation of the Board of Directors, the membership voted to increase the annual dues from \$1.00 to \$2.00 as of May 1, 1957.

6. It was announced that the 1958 meetings would be held at the Bellevue-Stratford in Philadelphia, April 11 and 12.

7. Five non-APA members were approved for membership, and one was rejected.

8. The association voted to express its thanks to the Committee on Local Arrangements, the Hotel Statler, the New York City Convention and Tourist Bureau, and to the American Psychological Association Central Office.

9. The interim report and proposed budget for 1957-58 were approved, as presented by the Treasurer, Roy B. Hackman. Because all bills incurred during the fiscal year have not been submitted as yet, the audited financial statement is not included in these proceedings.

## PROGRAM

### PAPER SESSIONS

#### Vision

MICHAEL J. ZIGLER, *Wellesley College*, Chairman

Spectral sensitivity as a function of level and spectral composition of rapid-adapting stimuli. ROBERT M. BOYNTON, GILLRAY KANDEL, AND JUDITH W. ONLEY, *University of Rochester*.

Color distortions in small foveal fields. LEO M. HURVICH AND DOROTHEA JAMESON, *Eastman Kodak Company*.

Some hue discrimination functions of color blind persons. C. H. GRAHAM, S. BALARAMAN, AND YUN HSIA, *Columbia University*.

Patterning versus segregation in the production of visual after-effects. RICHARD HELD, *Brandeis University*.



A rise in the pigeon's dark adaptation curve with a red test stimulus. DONALD S. BLOUGH, *National Institute of Mental Health*.

Neural factors in visual excitability as measured by the time course of light adaptation. W. S. BATTERSBY AND I. H. WAGMAN, *Mt. Sinai Hospital*.

#### Clinical Processes

E. JOSEPH SHOEN, *Teachers College, Columbia University*, Chairman

Perception of "oral" and "skin" words by patients with nutritional and dermatologic disorders. ANNE M. RITTER AND MARK RUBINSTEIN, *University of Pittsburgh*.

The relationship between content and overt interaction patterns in psychiatric interviews. JEANNE S. PHILLIPS, RUTH G. MATARAZZO, JOSEPH D. MATARAZZO, AND GEORGE SASLOW, *Harvard Medical School and Massachusetts General Hospital*.

A study of the validity, process, and bases of clinical judgment, using a limited unit of projective test data. WILLIAM T. POWERS AND ROY M. HAMLIN, *Western Psychiatric Institute*.

Psychological test correlates of interview interaction behavior. RUTH G. MATARAZZO, JOSEPH D. MATARAZZO, GEORGE SASLOW, AND JEANNE S. PHILLIPS, *Harvard Medical School and Massachusetts General Hospital*.

Process in clinical judgment: "critical elements" in psychotic and non-psychotic test behaviors. ROY M. HAMLIN, *Western Psychiatric Institute*.

An experimental study of an initial interview: the formulations and techniques of Rogerian therapists. HANS H. STRUPP, *The George Washington University, School of Medicine*.

#### Human Learning

CHARLES N. COFER, *University of Maryland*, Chairman

Paired-associate learning as a function of task difficulty and motivation. HERBERT LEVITT, *University of Massachusetts*.

Conceptual block-sorting as a function of assignment and strength of labels. HARVEY LACEY, *University of Massachusetts*.

Experiments and the concept of concept formation. W. A. DETERLINE, *University of Pittsburgh*.

A comparison of incidental and intentional learning of lifted weights. IRVING J. SALTZMAN, *Harvard University*.

A study of memory for visual form. PHIMA ENGELSTEIN AND IRVIN ROCK, *New School for Social Research, New York*.

Concept attainment of a card-sorting problem with Navaho subjects. ARNOLD E. HOROWITZ, *Mental Health Research Institute, University of Michigan*.

#### Social Psychology I

RICHARD CHRISTIE, *Columbia University*, Chairman

The influence of the Mother's presence on children's doll play aggression. HARRY LEVIN AND VALERIE F. TURGEON, *Cornell University*.

Two-category judgments of sequences of stimuli of two values. CLINTON DE SOTO, *The Johns Hopkins University*.

Construction of some people spaces. ROBERT F. BOLDT, *Department of the Army, TAGO*.

Communication in experimentally created hierarchies: Replication and extension. ARTHUR R. COHEN, *Yale University*.

Affect and cognition in attitude structure and attitude change. MILTON J. ROSENBERG, *Yale University*.

The effects of personal and shared threats upon social prejudice. SEYMOUR FESHBACH AND ROBERT SINGER, *University of Pennsylvania*.

Comparative latent structure analysis. W. A. GIBSON, *Personnel Research Branch, TAGO, Department of the Army*.

Some organizational determinants of human values. MELVIN J. LERNER, *Elmira College and New York University*.

#### Brain Function I

KARL H. PRIBRAM, *Institute of Living and Yale University*, Chairman

Incidence and properties of the kappa EEG rhythm. JOHN C. ARMINGTON AND LEONARD L. MITNICK, *Walter Reed Army Institute of Research*.

Complexity of tasks and the kappa EEG rhythm. LEONARD L. MITNICK AND JOHN C. ARMINGTON, *Walter Reed Army Institute of Research*.

The spiral after effect and reversible figures as measures of brain damage and memory. GEORGE SPIVACK AND MURRAY LEVINE, *The Devereux Foundation*.

Figure-ground perception in patients with cerebral tumor. M. POLLACK, W. S. BATTERSBY, AND M. B. BENDER, *Mt. Sinai Hospital*.

Effects of penetrating brain injury on intelligence test scores. SIDNEY WEINSTEIN AND HANS-LUKAS TEUBER, *Bellevue Medical Center, New York University*.

The effect of interfering with pattern vision during recovery from brain damage. EUGENE PAUTLER AND GARY WALTERS, *University of Buffalo*.

Some stimulus factors influencing form discrimination in the monkey with bitemporal lesions. TAUBA PASIK, P. PASIK, M. B. BENDER, AND W. S. BATTERSBY, *Mt. Sinai Hospital*.

## Animal Behavior I

- FRANK W. FINGER, *University of Virginia*, Chairman  
 The effect of discrimination training on resistance to extinction. HERBERT L. KLIONS, MICHAEL F. DOERING, AND LLOYD E. HOMME, *University of Pittsburgh*.  
 Stimulus satiation in situations without choice. MURRAY GLANZER, *American Institute for Research, University of Pittsburgh*.  
 Effects of strength of drive on learning and extinction. HERBERT BARRY, III, *Yale University*.  
 The effect of an irrelevant drive on maze learning in the rat. HARRY W. BRAUN, CARL E. WEDEKIND, AND JOSEPH F. SMUDSKI, *University of Pittsburgh and Montefiore Institute of Research*.  
 A test of the "discrepancy hypothesis" of motivation using intensity of visual stimulation. ROBERT E. LUBOW AND THOMAS J. TIGHE, *Cornell University*.  
 The effects of two training parameters on response frequencies during satiated test periods. JULIAN I. TABER, *University of Pittsburgh*.  
 Exploratory behavior in rats increases with hunger: A new technique removes some previous ambiguities. P. G. ZIMBARDO AND N. E. MILLER, *Yale University*.  
 The effect of prior reinforcement in the presence of visual patterns on learning to discriminate them. RICHARD D. WALK, HERBERT L. PICK, JR., AND ELEANOR J. GIBSON, *Cornell University*.

## Physiological I

- JOHN K. BARE, *William and Mary College*, Chairman  
 Effect of female sex hormones on incubation behavior in the Ring Dove, *Streptopelia risoria*. DANIEL S. LEHRMAN, *Rutgers University*.  
 The effect of insulin injections on the selection of glucose solutions in a free-choice feeding situation. HARRY L. JACOBS, *Bucknell University*.  
 An osmotic factor in the regulation of food intake in the rat. J. S. SCHWARTZBAUM AND H. WARD, *Institute of Living and Stanford University*.  
 Conditioning of the pupillary dilation response in normal and Flaxedilized cats. ARNOLD A. GERALD AND PAUL A. OBRIST, *University of Kansas and University of Rochester*.  
 The effects of positive reinforcement schedules, conditioned "fear," and avoidance behavior upon plasma 17-hydroxycorticosteroid levels in the rhesus monkey. J. V. BRADY, M. SIDMAN, AND J. W. MASON, *Walter Reed Army Institute of Research*.  
 A further investigation of the effects of several centrally-acting drugs on the Continuous Performance Test (C.P.T.). ALLAN F. MIRSKY, *National Institute of Mental Health*.

## Invited Addresses

- Psychology and the Design of Machines by FRANKLIN V. TAYLOR. HAROLD G. SEASHORE, Chairman, and LEONARD C. MEAD, Discussant.  
 Perception and Perceptual Learning by DONALD O. HEBB. WILLIAM N. SCHOENFELD, Chairman, and ROBERT B. MACLEOD, Discussant.  
 Soviet Psychology Since 1950 by GREGORY RAZRAN. ROBERT S. WOODWORTH, Chairman, and B. F. SKINNER, Discussant.

## SPECIAL MEETINGS

- Group Dynamics and Group Psychotherapy. MAX ROSENBAUM, Chairman; MILTON BERGER, NORMAN LOCKE, AND HUGH MULLAN.  
 Autistic and Schizophrenic Children. DANIEL BROWER, Chairman; LAURETTA BENDER, MELITTA SPERLING, A. G. WOLTMAN, DAVID WECHSLER, ZYGMUNT A. PIOTROWSKI, AND SYLVIA BRIDY, Discussants.  
 Psi Chi. SHERMAN ROSS, Chairman.  
 Cooperative Psychological Research Project in T. B. American Association of University Practicum Training Centers.  
 Conference of State Psychological Associations.  
 New York State Licensing Procedures.

## SYMPOSIUM

- Problems, Experiments and Issues in the Transfer Effect of Early Exposure on Perceptual Discrimination. RONALD H. FORGUS, Chairman; JEROME S. BRUNER, HELEN MAHUT, NICHOLAS PASTORE, AND WILLIAM C. H. PRENTICE, Discussants.

## FILMS

- A special showing of new films was presented by McGraw-Hill, Inc.

## PAPER SESSIONS

## Group Processes

- ALBERT PEPITONE, *University of Pennsylvania*, Chairman  
 A statistical approach to group discussion analysis. ELLIOTT M. MCGINNIES AND IRWIN ALTMAN, *University of Maryland*.  
 Conformity and motivation. GEORGE MOELLER AND MORTIMER H. APPLEZWEIG, *Connecticut College*.  
 Composition and organization factors in small group task performance. T. B. ROBY, *Tufts University*.  
 Group relevant and person relevant determinants of interpersonal evaluation. SEYMOUR LEVY, *Queens College*.

Group learning and communication as a function of task and structure "demands." J. T. LANZETTA AND T. B. ROBY, *Fels Group Dynamics Center, University of Delaware and Tufts University*.

Unit formation in perception of interpersonal attitudes. RENATO TAGIURI AND NATHAN KOGAN, *Harvard University*.

### Applied Psychology

T. G. ANDREWS, *University of Maryland*, Chairman

Display size and performance on simple perceptual tasks. PETER D. BRICKER, *Bell Telephone Laboratories*.

The effect of empty field myopia on air to air visibility at high altitude. ROBERT H. BROWN, *Naval Research Laboratory, Washington, D. C.*

Changes in observing rate during a vigilance task. JAMES G. HOLLAND, *Naval Research Laboratory, Washington, D. C.*

Track prediction on four types of plotting displays. W. B. KNOWLES AND W. D. GARVEY, *General Electric Company, Ithaca, New York and Naval Research Laboratory*.

Differential effect of "stress" on a simplified and a non-simplified operator task in a man-machine system. WILLIAM D. GARVEY, *Naval Research Laboratory, Washington, D. C.*

Manual dexterity as a function of temperature. EDWIN R. DUSEK, *Quartermaster Research and Development Center, Natick, Massachusetts*.

### Sensory (Non-Visual)

IRWIN POLLACK, *Operational Applications Laboratory, Bolling Air Force Base*, Chairman

Skin temperature and pressure sensitivity. A. W. MILLS, *Quartermaster Research and Development Command, Natick, Massachusetts*.

Intensity-duration relations for taste using electrical stimulation. ERNEST DZENDOLET, *Brown University*.

Masking patterns of tones. RICHARD H. EHMER, *Naval Medical Research Laboratory, New London, Connecticut*.

On energy integration in the ear. C. K. MYERS AND J. DONALD HARRIS, *U.S.N. Medical Research Laboratory, New London, Connecticut*.

Some primary auditory abilities in pitch and loudness. J. J. O'HARE, J. D. HARRIS, AND R. H. EHMER, *Naval Medical Research Laboratory, New London, Connecticut*.

Discrimination of an intensity increment as a function of envelope and duration of the increment. J. D. HARRIS AND R. H. EHMER, *Naval Medical Research Laboratory, New London, Connecticut*.

### Clinical Testing

ERNEST S. BARRATT, *University of Delaware*, Chairman

A technique for improving the reliability of the Rorschach. HARRY STEIN, *Einstein College of Medicine and Bronx Municipal Hospital*.

Approaches to reliability of projective tests with special reference to the Blacky Pictures Test. SAMUEL GRANICK AND NORMA A. SCHEFLEN, *St. Christopher's Hospital*.

Evaluation of the construct validity of Barron's Ego-Strength Scale. ARTHUR S. TAMKIN, *Veterans Administration Hospital, Northampton, Massachusetts*.

PEAQ: A scale for the screening of psychopaths. MORTIMER H. APPLEZWEIG, ANDREW S. DIBNER, AND RAYMOND L. OSBORNE, *Connecticut College and Clark University*.

Order and time interval effects on two anxiety scales. FREDERICK LIGHTHALL, KENNETH DAVIDSON, AND RICHARD WAITE, *Yale University*.

The effect on self descriptions of varying test content. MARVIN J. FELDMAN, *University of Buffalo*.

The negation interview: A new non-projective personality technique. CHARLES W. SLACK, *Harvard University*.

The tendency of the Dorken and Kral Rorschach brain damage measure to score false positives in a psychiatric population. H. L. SASLOW AND W. G. SHIPMAN, *Staunton Clinic, University of Pittsburgh*.

### Verbal Behavior

JAMES DEESE, *The Johns Hopkins University*, Chairman

The role of adjectives as context in the organization of meaningful material: I. Exploratory studies suggesting a mediation model. CHARLES N. COFER AND RICHARD C. GONZALEZ, *University of Maryland*.

The role of adjectives as context in the organization of meaningful material: II. Tests of theoretical implications derived from a mediation model. RICHARD C. GONZALEZ AND CHARLES N. COFER, *University of Maryland*.

Rate of production of constrained associates as a function of the informational uncertainty of the constraint: A technique for estimating statistical dependencies in English. ROGER N. SHEPARD, *Harvard University*.

A study of some cues for the perception of the voiced stop consonants. H. S. HOFFMAN, *University of Connecticut*.

A study on consensuality in the selection of properties of line patterns as expressive of linguistic meanings. MARGERY BODANSKY, *Clark University*.

The effects of language of memorizing and recall on the number of pictures recalled by bilinguals. SUSAN M. ERVIN, *Harvard School of Education*.



The use of phoneme labels in distinguishing speech sounds: an effect of learning on perception. BELVER GRIFFITH, *Bell Telephone Laboratories*.

#### Aversive Conditioning

HERBERT M. JENKINS, *Bell Telephone Laboratories*,  
Chairman

Effects of chlorpromazine on the acquisition and extinction of an avoidant response in the rat. ROBERT ADER AND DANIEL W. CLINK, *National Institute of Mental Health*.

Avoidance, escape, and extinction behavior as functions of the aversive stimulus intensity. JOHN J. BOREN AND MURRAY SIDMAN, *Walter Reed Army Institute of Research*.

Some effects of chlorpromazine on shock-maintained behavior in rats. DONALD H. BULLOCK, *Institute of the Pennsylvania Hospital*.

Acquisition and extinction of conditioned "fear" as a function of partial shock reinforcement. I. GELLER, H. KAILAN, L. STEIN, AND J. V. BRADY, *Walter Reed Army Institute of Research*.

Reinforcement percentage varied within individual subjects as a factor in the extinction of conditioned "fear." LARRY STEIN AND JOSEPH V. BRADY, *Walter Reed Army Institute of Research*.

Avoidance conditioning as a factor in the effects of unavoidable shocks on food-reinforced behavior. R. J. HERRNSTEIN AND MURRAY SIDMAN, *Walter Reed Army Institute of Research*.

Maintenance of avoidance behavior by unavoidable shocks. MURRAY SIDMAN, R. J. HERRNSTEIN, AND DONALD G. CONRAD, *Walter Reed Army Institute of Research*.

The delay of secondary reward gradient in avoidance learning. LEON J. KAMIN, *Queen's University*.

#### PRESIDENTIAL ADDRESS AND ANNUAL BUSINESS MEETING

Presidential Address:

The Phantom Plateau by FRED S. KELLER.

CLARENCE H. GRAHAM, Chairman

#### PAPER SESSIONS

##### Animal Behavior II

HUGHBERT C. HAMILTON, *Temple University*,  
Chairman

Resistance to extinction as a function of number of shock-termination reinforcements. SAM L. CAMPBELL, *Creedmoor Institute for Psychobiologic Studies*.  
The effects of predictable vs. unpredictable punishment in the albino rat. ARLO K. MYERS, *Yale University*.

Electrical and behavioral effects of different types of shock stimuli on the rat. ROBERT TEGTHSOONIAN AND BYRON A. CAMPBELL, *Harvard University and Princeton University*.

Effects of "controllable" and "uncontrollable" shock stimulation in the rat. JANICE E. THORNE AND WALTER C. STANLEY, *Brown University*.

The effect of preliminary training on the acquisition and extinction of an avoidance response. CHARLES HAMILTON AND BERNARD MIGLER, *Montefiore Institute of Research and the University of Pittsburgh*.

The effect of an irrelevant drive on the acquisition and extinction of a conditioned avoidance response in the white rat. CARL E. WEDEKIND, *Montefiore Hospital Institute of Research and University of Pittsburgh*.

Absolute and difference thresholds of the white rat for electric current, and the effect of age upon these thresholds, as measured by a new objective technique. ARTHUR L. KOROTKIN, JEROME H. JAFFE, AND FRANK R. RYAN, *Temple University*.

Conditioning of the pupillary dilation response of humans as a function of the CS-UCS interval. JOHN K. WOODWARD AND ARNOLD A. GERALL, *University of Rochester and University of Kansas*.

#### Visual Perception

RICHARD T. ZEGERS, *Fordham University*, Chairman

Differential effects of directional dynamics of pictured objects on apparent speed of real motion in artists versus chemists. PETER E. COMALLI, JR., *Clark University*.

Perception of the vertical and cognitive maturity. FRANK E. CLARKSON AND DONALD BROVERMAN, *Clark University*.

Apparent movement of simple figures in the Ganzfeld. WALTER COHEN, *University of Buffalo*.

Tachistoscopic perception of verticality and the constancy of visual space. JAN H. BRUELL, *Western Reserve University and Highland View Hospital, Cleveland, Ohio*.

The effects of limited time exposure on size constancy. W. L. GULICK AND R. E. STAKE, *Princeton University*.

Adaptation to a distorted visual field: an organismic approach. DUILIO GIANNITRAPANI, *Clark University*.

#### Industrial Psychology

ROGER M. BELLOWS, *Rutgers University*, Chairman

Aptitude tests as predictors of success in accountancy twelve years later. ROBERT L. THORNDIKE AND ELIZABETH HAGEN, *Teachers College, Columbia University*.

## Comprehensibility and readability of technical manuals.

ROBERT B. SLEIGHT, *Applied Psychology Corporation*.

An investigation of the feasibility of training highly technical engineering managers to perform psychological depth interviews. A. TERRENCE POLIN, *General Electric Company, Cincinnati, Ohio*.

Development of a human relations inventory for industrial supervisors. MYRON A. FISCHL AND JOSEPH TIFFIN, *W. R. Simmons & Associates Research, Inc., and Occupational Research Center, Purdue University*.

An experimental investigation of the influence of different attitudes toward delegation on solutions to management problems. ALLEN R. SOLEM, *University of Maryland*.

A factor study of drivers' attitudes. LEON G. GOLDSTEIN AND JAMES N. MOSEL, *Personnel Research Branch TAGO, and George Washington University*.

## Clinical Psychology

JULIUS WISNER, *University of Pennsylvania*,  
Chairman

Reinforcement of affect responses of schizophrenics during the clinical interview. KURT SALZINGER AND STEPHENIE PISONI, *Biometrics Research, New York State Department of Mental Hygiene*.

The relationship of Rorschach developmental level to hospital adjustment and social participation among chronic schizophrenics. HAROLD WILENSKY, *F.D.R. Veterans Administration Hospital, Montrose, New York*.

An experimental analysis of the motivation of chronic psychotics. OGDEN R. LINDSLEY, *Harvard Medical School and Metropolitan State Hospital*.

The effect of changes in the social stimulus situation upon social participation in chronic schizophrenics. HERBERT E. SPOHN AND WILLIAM WOLK, *F.D.R. Veterans Administration Hospital, Montrose, New York*.

The interpersonal relationship in the rehabilitation of chronic neuropsychiatric patients. IRVING WOLF AND JOSEPH M. SACKS, *Veterans Hospital, Brockton, Massachusetts*.

A study of social interaction on a ward of chronic schizophrenics. CARMI SCHOOLER AND HERBERT E. SPOHN, *F.D.R. Veterans Administration Hospital, Montrose, New York*.

Somato-psychotherapeutic approach to long-term schizophrenic patients. LEO SHATIN, EARL X. FREED, LEONARD ROCKMORE, AND IAN C. FUNK, *Albany Veterans Hospital and Albany Medical College*.

## Human Learning II

ROBERT SILVERMAN, *New York University*, Chairman

Age differences in retroactive inhibition as a function of the degree of similarity of serial position between the original and interpolated learning. EUGENE H. WYWROCKI AND HARRY W. BRAUN, *Human Resources Office, Washington, D. C. and University of Pittsburgh*.

The role of repetition in associative learning. IRVIN ROCK, *New School for Social Research, New York*.

Nonsense syllables as a function of letter frequency. ALBERTO DI MASCIO, *Massachusetts Mental Health Center*.

Aural-visual transfer of paired-associates. HARVEY LIFTON, *University of Massachusetts*.

The effects of three sets of instruction on the quality of word association responses. JURIS DRAGUNS, JOHN H. FLAVELL, AND LEONARD FEINBERG, *University of Rochester*.

Message type as a parameter of learning to receive International Morse Code. DONALD A. COOK, *Barnard College*.

Factors inhibiting the recognition of words as expressive of common concepts. HERBERT M. NEWMAN, *Brooklyn College*.

Associative reaction time as a function of frequency of S-R pairing and number of response alternatives. JERRY S. WIGGINS, *University of Rochester*.

## Social Psychology II

SOLOMON E. ASCH, *Swarthmore College*, Chairman

The effect of fear-arousing appeals upon overt behavioral conformity, temporal commitment, and mediated generalization of implicit responses. EDMUND S. HOWE AND LEMORE R. ROHT, *Hofstra College*.

The effects of some types of power relationships and motivational orientations upon the development of interpersonal trust. LEONARD SOLOMON, *Bell Telephone Laboratories*.

Changing patterns of religious interest: A retest after 15 years. IRVING E. BENDER, *Dartmouth College*.

A test of Schlosberg's theory of emotion with Greek subjects. HARRY C. TRIANDIS, *Cornell University*.

Authoritarian child training ideology and political affiliation in France. ARNOLD MEADOW, *University of Buffalo*.

Some variables associated with anti-Negro bias in children. ARON WOLFE SIEGMAN, *University of North Carolina*.

A cross cultural study of the social direction of aggression. LEIGH MINTURN TRIANDIS, *Cornell University*.

A study of the relationships between adolescent sociometric status and sex in goal setting and performance. RITA R. WERTHEIMER, *Western Psychiatric Institute, University of Pittsburgh.*

### Stress

RAY HYMAN, *Harvard University*, Chairman

Autonomic feedback: The perception of autonomic activity. JEAN B. MATTER, GEORGE MANDLER, AND ELLEN T. UVILLER, *Harvard University.*

Correlates of psychological stress with special emphasis on recovery rate. HELEN J. GOLDSMITH, *Temple University.*

The interaction among anxiety level, stress instructions and level of difficulty. GERALD WIENER, *Rosewood State Training School, Owings Mills, Maryland.*

Interaction of stress and anxiety. SOLIS L. KATES AND FRED SCHWARTZ, *University of Massachusetts.*

Performance under task-induced stress as a function of cognitive organization. DONALD M. BROVERMAN AND RICHARD S. LAZARUS, *Clark University.*

Somatic reactivity and performance under stress as a function of differential motivation. WILLIAM VOGEL, ROBERT W. BAKER, AND RICHARD S. LAZARUS, *Clark University.*

### Brain Function II

PHILIP TEITELBAUM, *Harvard University*, Chairman

A systematic investigation of the relationship between emotional behavior and the destruction of septal nuclei and fornix components in the rat. J. M. HARRISON AND M. LYON, *Boston University.*

The function of retino-cortical connections in stimulus generalization; between two electrodes implanted in the striate cortex of the same side. G. S. GROSSER AND J. M. HARRISON, *Psychological Laboratory, Boston University.*

Effects of subcortical lesions in monkeys on visual-discrimination and delayed-alternation performance. H. E. ROSVOLD AND M. MISHKIN, *National Institute of Mental Health.*

Disturbances of the maze habit following occipital cortex removals in blind monkeys. JACK ORBACH, *Montreal Neurological Institute, and McGill University.*

Function of corpus callosum in contralateral transfer of somesthetic discrimination in cats. JOHN S. STAMM AND R. W. SPERRY, *Institute of Living, Hartford, Connecticut and California Institute of Technology.*

Apparent sleep produced by cortical stimulation. NEAL M. BURNS, *McGill University.*

Retention deficits produced in the rat by stimulation of the ascending reticular formation. STEPHEN E. GLICKMAN, *McGill University.*

### Vision II

ALBERTA S. GILINSKY, *Kenyon & Eckhardt*, Chairman

Eye movements during binocular fixation. JOHN KRAUSKOPF, TOM CORNSWEET, AND LORRIN A. RIGGS, *Brown University and Yale University.*

Correction of errors in hand-eye coordination after distortion of the retinal image. ALAN V. HEIN AND RICHARD M. HELD, *Brandeis University.*

Models for the summation of visual information. GILBERT K. KRULEE, *Case Institute of Technology, Cleveland, Ohio.*

Accommodation, convergence and apparent size. ERIC G. HEINEMANN, ENDEL TULVING, AND JACOB NACHMIAS, *Vassar College, University of Toronto, and University of Rochester.*

Direction of involuntary eye movements during monocular fixation. JACOB NACHMIAS, *University of Rochester.*

Electrical measurement of level and size of eye potential corresponding to magnitude and direction of fixation shift. CHRISTINE KRIS, *Massachusetts Institute of Technology.*

### Operant Behavior

M. E. BITTERMAN, *The Institute for Advanced Study*, Chairman

The effects of deprivation upon generalization along the temporal dimension. D. G. CONRAD, MURRAY SIDMAN, AND R. J. HERRNSTEIN, *Walter Reed Army Institute of Research.*

Some structural and sequential properties of a multi-response operant under regular reinforcement and extinction. FRANCIS MECHNER, *Columbia University.*

A combination of fixed-interval and fixed-ratio schedules of conditioned reinforcement in chimpanzees. ROGER T. KELLEHER, *Yerkes Laboratories of Primate Biology.*

The development of a chain of behavior under a multiple-element schedule of reinforcement. LEWIS R. GOLLUB, *Harvard University.*

Changes in performance during long experimental sessions. B. F. SKINNER AND W. H. MORSE, *Harvard University.*

Properties of behavior paced by an external stimulus. W. H. MORSE AND B. F. SKINNER, *Harvard University.*



Hand independence in the chimpanzee under concurrent schedules of reinforcement. CHARLES B. FERSTER, *Yerkes Laboratories of Primate Biology*.

A technique for the experimental analysis of conflict. ROBERT BERRYMAN, *Adelphi College*.

### Probability Learning

WILLIAM J. MCGILL, *Massachusetts Institute of Technology*, Chairman

Two-choice behavior of rhesus monkeys in a noncontingent situation. WILLIAM A. WILSON, JR. AND A. ROBERT ROLLIN, *Institute of Living and University of Connecticut*.

Effects of first-order conditional probability in a two-choice learning situation with humans. NORMAN H. ANDERSON, *Yale University*.

The influence of conditional probability interpolated activity and stimulus similarity upon responses to sequentially presented stimuli. KENNETH E. LLOYD AND JOHN B. FEALOCK, *University of Virginia*.

Stimulus uncertainty, response uncertainty and stress in problem solving. F. ROBERT BRUSH, *University of Maryland*.

The application of a statistical model to matching-to-sample behavior in humans. WILLIAM E. MONTAGUE AND LYNE STARLING REID, *University of Virginia*.

The effects of motivation and probability of reward on discrimination learning. PAUL J. WOODS, *University of Connecticut*.

### Personality

ALBERT S. THOMPSON, *Columbia University*, Chairman

Muscle action potential patterns as a function of practice and task-centering in a simple reaction time experiment. HERMAN NIEBUHR, JR., *University of Pennsylvania*.

Some personality correlates of aesthetic preference. ROBERT H. KNAPP, *Wesleyan University*.

The influence of lysergic acid diethylamide on "starting position effect" in schizophrenic and normal adults. ROBERT S. LIEBERT, HEINZ WERNER, AND SEYMOUR WAPNER, *Clark University*.

Autokinetic movement and introversion. CYRIL R. SUTTER, *Fordham University*.

Some relationships between manifest anxiety, defensiveness, and future time perspective. RONALD S. LIPMAN, *University of Connecticut*.

Speech disturbances and emotional verbal content in initial interviews. GEORGE F. MAHL, *Yale University Medical School*.

Intelligence and emotional disturbance: Evidence from army and veterans administration records. JOHN B. MINER AND JAMES K. ANDERSON, *Columbia University*.

Factors related to the collaboration and resistance behavior of U. S. Army POWS in Korea. JULIUS SEGAL, *Human Resources Research Office, The George Washington University*.

### Animal Behavior III

JULIUS KLING, *Brown University*, Chairman

Discrimination-reversal in the fish. JEROME WODINSKY AND M. E. BITTERMAN, *American Museum of Natural History and the Institute for Advanced Study*.

An experimental critique of Gelber's investigation of behavioral modification in *Paramecium aurelia*. DONALD D. JENSEN, *Yale University*.

The conceptual basis of the chimpanzee's performance on the sameness-difference, discrimination problem. JOHN S. ROBINSON, *Princeton University*.

Comparison of place and response learning in a simultaneous-successive discrimination learning situation. T. E. MCGILL AND J. S. ROBINSON, *Princeton University*.

Learning and relearning in a 100:0 T-maze. EUGENE H. GALANTER, ROBERT R. BUSH, AND LUCY TURNER, *University of Pennsylvania and Harvard University*.

The role of contextual cues in latent extinction. H. MOLTZ, L. ROSENBLUM, AND NINA TOKAROW, *Brooklyn College*.

The partial reinforcement extinction effect (PREE) as a function of the instrumental response. M. R. D'AMATO AND MAY F. D'AMATO, *University College, New York University*.

Rate of conditioning as a function of the spatial location of the stimulus. GEORGE W. BOGUSLAVSKY, *Cornell University*.

### Physiological II

ELIOT STELLAR, *Institute of Neurological Sciences, University of Pennsylvania*, Chairman

Effects of electrical current changes on self stimulation of the brain. JAMES OLDS, *University of California, Los Angeles*.

Electrical activity in the medulla oblongata elicited by chemical stimulation of the rat's tongue. CARL PFAFFMANN AND BRUCE P. HALPERN, *Brown University*.

Acquisition and extinction of an avoidance response following dorsofrontal decortication and caudatectomy in cats. ROBERT L. THOMPSON, CHRISTIAN A. HOVDE, AND FRED A. METTLER, *Columbia University*.

The effect of cingulectomy on fear. EPHRAIM PERETZ, *Institute of Neurological Sciences, University of Pennsylvania.*

Behavioral changes in male guinea pigs with bilateral amygdala lesions. ELLIOT S. VALENSTEIN, ROBERT W. GOY, AND LILLIAN BLAKE, *Walter Reed Army Institute of Research and University of Kansas.*

The effect of gentling on some psychological and physiological phenomena. RUSSELL F. DOOLITTLE AND ROBERT MEADE, *Trinity College.*

Learning as a function of change of sensory stimulation. DONALD G. FORGAYS AND HARRY LEVIN, *Cornell University.*

Both rewarding and punishing effects from stimulation of posterior hypothalamus of cats with same electrodes at same intensity. WARREN W. ROBERTS, *Yale University.*

#### Developmental

GEORGE W. GOETHALS, *Harvard University*, Chairman

Responses by brain-injured children on the intermediate size problem. RITA G. RUDEL, *New York University College of Medicine.*

The Cain complex and de-identification. FRANCES FUCHS SCHACHTER AND LUCILLE MLODNOSKY, *Stanford University.*

Sharing behavior in children comparing age, sex, and size of family. PATRICIA GROSS AND BRITOMAR J. HANDLON, *Mount Holyoke College.*

Learning by imitation in kindergarten children. JUDY F. ROSENBLITH, *Laboratory of Human Development, Harvard University.*

Recognition of pictures in various orientations by children of different ages. LILA GHENT, *Psychophysiological Laboratory, New York University-Bellevue Medical Center.*

A developmental study of changes in behavior under delayed auditory feedback. RICHARD ALLEN CHASE AND SAMUEL SUTTON, *New York State Department of Mental Hygiene and Columbia Presbyterian Medical Center.*

The influence of a single sex labelling of toys upon the play behavior of younger and older boys and girls. CAROLYN N. BRYAN, BRITOMAR J. HANDLON, AND LORRAINE NADELMAN, *Harvard Graduate School of Education and Mount Holyoke College.*

# PROCEEDINGS OF THE TWENTY-SEVENTH ANNUAL MEETING OF THE ROCKY MOUNTAIN PSYCHOLOGICAL ASSOCIATION

WILSON J. WALTHALL, JR., Secretary  
*University of Wyoming*

THE Twenty-seventh Annual Meeting of the Rocky Mountain Psychological Association was held at the Hotel Utah in Salt Lake City, Utah, April 25-27, 1957. Approximately 200 persons attended.

Marvin W. Kahn reported for the membership committee that membership had grown to 266.

Maurice P. Smith served as President for 1956-57. Calvin W. Taylor became President for 1957-58. Anna

Y. Martin was elected President-elect for 1957-58. William H. Brown was elected Secretary for a three-year term. James W. Taylor continues in office as Treasurer.

Committee chairmen for the year were: Membership, Marvin W. Kahn; Program, Paul B. Porter; Public Relations, Carroll A. Whitmer.

The 1958 meeting is to be held in New Mexico.

## PROGRAM

### ADDRESSES

Social Integration of the Moose Calf Particularly as Affected by the Mother-Young Relationship. Invited Address by MARGARET ALTMANN, *Jackson Hole Biological Research Station, University of Wyoming.*

Psychology's Developing Role in Public Health. Invited address by HAROLD M. HILDRETH, *Community Services Branch, National Institute of Mental Health.*

Invited Address by LAUNOR F. CARTER, *System Development Division, The Rand Corporation.*

Presidential Address by MAURICE P. SMITH, *University of Colorado, President of the Rocky Mountain Psychological Association.*

### SYMPOSIA

#### Therapist Behavior in Group Therapy

FRED DEWIT, *State Hospital South, Blackfoot.*

JOHN M. LANDWARD, *VA Mental Hygiene Clinic, Salt Lake City.*

WILLIAM F. HILL, *Utah State Hospital, Provo.*

DONALD D. GLAD, *University of Colorado Medical Center.*

#### Current Trends in Developmental Psychology

GLENN TERRELL, *University of Colorado.*

WALTER EMMERICH, *University of Colorado.*

WALTER MISCHER, *University of Colorado.*

JOHN CONGER, *University of Colorado Medical Center.*

LEWIS BERNSTEIN, *VA Hospital, Denver.*

#### Various Disciplines and Their Ideal Relationships to Penology

E. C. BECK, *VA Hospital, Fort Douglas, Chairman*

Corrective psychology. JOHN LOWENFELD, *Federal Cor-*

*rectional Institution, Englewood.*

Psychiatry. FRANCIS T. RAFFERTY, *University of Utah Medical School.*

Psychiatric social work. ROBERT E. ASHPOLE, *Utah State Prison.*

Administration. CLAUDE PRATT, *Utah State Industrial School.*

Probation and parole. W. KEITH WILSON, *Utah Department of Adult Probation and Parole.*

Psychodiagnostics and classification. JOHN D. CAMBARERI, *VA Hospital, Fort Douglas.*

#### The Role of Psychology in Medical Schools

JOHN J. CONGER, *University of Colorado Medical School, Chairman*

Function of the statistical expert. ROGER ALLISON, *University of Utah Medical College.*

Undergraduate teaching. WILLIAM H. BROWN, *University of Utah Medical College.*

Graduate teaching. MARVIN W. KAHN, *University of Colorado Medical School.*

Clinical services. HAROLD KEELEY, *University of Colorado Medical School.*

The experimental psychologist. WILLIAM L. SAWREY, *University of Colorado Medical School.*

Discussants. DONALD J. BOURG, *University of Colorado Medical School* AND EUGENE L. BLISS, *University of Utah Medical College.*

#### Implications of the Western States Mental Health Survey

GERARD G. NEUMAN, *University of Utah Medical School.*

ALVIN R. HOWARD, *VA Hospital, Sheridan.*

LAWRENCE S. ROGERS, *VA Regional Office, Denver.*



- WILLIAM F. HILL, *Utah State Hospital*.  
 CARROLL A. WHITMER, *VA Hospital, Salt Lake City*.  
 CARL L. ANDERSON, *Regional Representative, National Institute of Mental Health*.

## PAPERS

- A factor analysis of attitudes, interests, achievement, and motivation of medical students. GERARD G. NEUMAN AND JOSEPH C. SALVATORE, *University of Utah Medical School*.  
 The "tell a story" technique for process research in psychotherapy. ROBERT A. HANSON, *Jewish National Home for Asthmatic Children, Denver, and Denver University*.  
 Delinquency, hostility, and the EEG. ARTHUR L. FOSTER, *Utah State Hospital, Provo*.  
 Children's preferences for delayed and immediate reinforcement in another culture. WALTER MISCHEL, *University of Colorado*.  
 The role of delayed reward in discrimination learning in children. GLENN TERRELL, *University of Colorado*.  
 The effects of early visual experience on adult discrimination learning. JACK W. FLEMING, *University of Colorado*.  
 A method for the analysis of the psychodiagnostic process. ALVIN R. MAHRER AND IRWIN R. STERNLICHT, *Fitzsimons Army Hospital, Denver*.  
 An investigation of interview cues which identify "successful" and "unsuccessful" men. VICTOR B. CLINE, *University of Utah*.  
 Stereotypy of ethnic group beliefs of college students. THURLOW R. WILSON, *University of New Mexico*.  
 Relationship of symptoms and problems to length of psychotherapy and improvement. JAMES W. TAYLOR AND FREDERICK J. TODD, *VA Mental Hygiene Clinic, Denver*.  
 The relationship of certain personality measures to examination performance under stress. NEIL A. CARRIER, *University of Colorado*.  
 Group therapy with married couples. JOHN M. LANDWARD, *VA Mental Hygiene Clinic, Salt Lake City*.  
 A tentative formulation of  $\bar{E}$  as a determinant of behavior. ALVIN R. MAHRER, *Fitzsimons Army Hospital, Denver*.  
 The influence of subjective time spent in practice on learning. MICHAEL WERTHEIMER, *University of Colorado*.  
 Influence of error density on checking efficiency. ROGER J. WELDON, *University of New Mexico*.  
 The relation of habit growth to "acquired distinctiveness of cues." CHARLES D. FINK, *University of Colorado*.  
 Stratification in the cognitive organization of words. DAVID T. BENEDETTI, *University of New Mexico*.  
 The effect of a visual-auditory-manual method of presentation versus a visual-machine method on the learning and retention of concepts. HOMER B. REED, *University of New Mexico*.  
 Effects of relevant and irrelevant information on the identification of concepts. CLINTON M. WALKER, *University of Utah*.  
 Motor performance as a function of task difficulty and distribution of practice. LYLE E. BOURNE, JR., *University of Utah*.  
 Discrimination learning in the squirrel monkey as a function of problem difficulty and deprivation. RAYMOND C. MILES, *Idaho State College*.  
 Subcortical stimulation as motivation and as signal for conditioned responses in cats. H. CLARKE NIELSON, *University of Utah*; ROBERT W. DOTY AND LESTER T. RUTLEDGE, JR., *University of Michigan*.  
 Conditioning and behavior of cats with chronic reticular system lesions. E. C. BECK, *VA Hospital, Fort Douglas*; R. W. DOTY, *University of Michigan*; K. A. KOOI, *VA Hospital, Fort Douglas*.  
 On the use of non-parametric methods. WILLIAM L. SAWREY, *University of Colorado Medical School*.  
 A comparison of the test-retest reliability of the Rorschach and Behn ink-blots. MARVIN W. KAHN, *University of Colorado Medical School*; JOHN TURNBULL, *University of Nebraska*; DENNIS KAMANO, *University of Denver*.  
 Analysis of errors made by high and low scores on a true-false examination. JEANNE L. RIVOIRE AND DAVID T. BENEDETTI, *University of New Mexico*.  
 "Book knowledge" vs. "field experience" in writing proficiency test items. M. DUANE BOWN AND CALVIN W. TAYLOR, *University of Utah*.  
 Maze learning of rats with varied goal situations as reinforcement. BEATA JENCKS, *University of Utah*.  
 Positive reinforcing effect of mild tail shock on position preference in the white rat. CARLETON JOHNSON, BETTY SWANSON, AND HAROLD COPPOCK, *New Mexico Highlands University*.

# PROCEEDINGS OF THE FOURTH ANNUAL MEETING OF THE SOUTHWESTERN PSYCHOLOGICAL ASSOCIATION

RUTH M. HUBBARD, Secretary  
Waco, Texas

THE Southwestern Psychological Association held its fourth Annual Meeting in Little Rock, Arkansas, April 4-6, 1957. The society has about 450 members, predominantly from Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas; registered at this meeting were 166 persons, over a third from Arkansas.

Special events included a Morning Coffee for the ladies held at the Governor's mansion, and a luncheon meeting sponsored by Psi Chi. The Presidential Address, entitled "Psychology and Social Responsibility,"

was delivered at the annual banquet by Gordon V. Anderson of the University of Texas.

New officers elected were: President, Robert Blake, University of Texas; President-elect, Wayne H. Holtzman, Hogg Foundation for Mental Hygiene, University of Texas; Treasurer, Joseph V. West, Baylor University. The Secretary, filling a two-year term, is Ruth M. Hubbard, Waco VA Hospital.

The fifth Annual Meeting of the society will be held April 3-5, 1958, in Austin, Texas.

## PROGRAM

### GENERAL SESSIONS

#### Symposium 1. Problems in the Treatment of Character Disorder (Drug Addiction) as Related to Personality Structure

PHILIP ROOS, Chairman

ARNOLD H. ZUCKER. Personality of the drug addict (character disorder).

RICHARD THURRELL. Problems this poses in hospital treatment.

GERTRUDE NORRIS. Problems this poses in dealing with family relationships in the hospital.

FRANCIS M. WICKERSHAM. Psychological investigation (projective tests, learning theory) as applied to treatment.

#### Symposium 2. Explorations in Perceptual Learning

CHARLES M. SOLLEY, Chairman

CHARLES M. SOLLEY AND MARY ENGEL. The influence of monetary rewards and punishments upon perceptual learning in children.

CHARLES SNYDER. Feedback and perceptual learning.

HAROLD J. McNAMARA. The influence of punishment (electric shock) upon perceptual learning.

WAYNE HOLTZMAN, Discussant.

### PARALLEL SESSIONS

#### Symposium 3. Human Stress in Industry

J. U. YARBOROUGH, Chairman

RICHARD N. CROWELL. Some examples of stress in industry.

PHINEAS J. SPARER. Methods of stress reduction in industry.

ERIE M. DARNALL. The interdisciplinary approach to human stress in industry.

ELLIS FREEMAN, Discussant.

A. Q. SARTAIN, Discussant.

#### Section A. Physiological Psychology 1

SYLVAN J. KAPLAN, Chairman

KEITH J. HAYES. The effects of prenatal irradiation on the physical and behavioral development of rats.

W. K. BOARDMAN, S. GOLDSTONE, AND W. T. LHAMON. The effects of certain drugs on time perception.

J. R. STRANGE AND W. W. RUSSELL. Individual color preference in chickens as a function of retinal sensitivity.

W. LYNN BROWN. The interaction of ECS with chlorpromazine and reserpine in rats.

#### Panel Discussion 1. Psychology as a Basic Science in Medical Education

S. J. FIELDS, Chairman

BEATRIX COBB, SANFORD GOLDSTONE, CARMEN MILLER  
MICHAEL, AND SAUL B. SELLS, Discussants.

#### Section B. Learning 1

CHARLES M. SOLLEY, Chairman

WAYNE VINEY, JACK CAPEHART, AND IRENE MACKINTOSH. The relationship between effort and extinction.

SYLVAN J. KAPLAN, GEORGE GENTRY, AND CHARLES ROGERS. Generalization for a concept of triangularity in the rhesus monkey.

- W. LYNN BROWN AND JOHN E. OVERALL. Recency, frequency, and probability in response prediction.  
A. C. PEREBOOM. A goalless gradient.

### Section C. Personality 1

ROBERT B. MORTON, Chairman

- NELDA CAWTHON, CARL R. OLDROYD, AND HARL H. YOUNG. Task performance under stress as function of self-ideal discrepancy.  
CLYDE M. ELMORE. Measuring the impairment of the abstracting function with the Proverbs Test. (Sponsored by D. R. GORHAM)  
H. GREENBERG AND S. JORDAN. Some effects of total blindness and partial sight on several personality traits.  
GYDA HALLUM. The effects of maladjustment on the number of human movement concepts appearing in finger paintings. (Sponsored by SYLVAN J. KAPLAN)

### Symposium 4. Autonomic Approaches to Human Behavior

ROSCOE A. DYKMAN, Chairman

- W. HORSLEY GANTT. (Unannounced title.)  
JOHN I. LACEY. A neurophysiological theory of impulsive, incautious behavior and its empirical test.  
ROBERT W. LANSING. The electroencephalogram and the resting state.  
WAYNE H. HOLTZMAN. Some methodological and statistical considerations in the treatment of autonomic variables.  
SAMUEL A. CORSON. Water, salt, and behavior.  
ROSCOE A. DYKMAN. Extinction of certain autonomic components of orienting behavior.

### Section D. Social Psychology

ROBERT BLAKE, Chairman

- ROBERT V. HAMILTON. The social psychology of a tornado.  
MONROE LEFKOWITZ. The validity of the Index of Social Status in cross-national research.  
MUZAHER SHERIF AND W. R. HOOD. Experimental study of relationship between judgment and verbal report.  
HERBERT GREENBERG AND DOLORES HUTTO. The attitudes of students in a West Texas college towards integration.

### Section E. Personality 1

J. L. McCARY, Chairman

- HARL H. YOUNG, JR. A test of Witkin's field-dependency hypothesis.  
HAROLD B. CRASILNECK AND CARMEN MILLER MICHAEL. Performance on the Bender under hypnotic age regression.

- SIDNEY J. FIELDS. Personality inventory profiles during and after real life stress.  
MARY JEFFERY COLLIER AND EUGENE L. GAIER. Preferred childhood stories of college women.

### Section F. Assessment and Prediction 1

KENNETH L. BEAN, Chairman

- R. E. STOLTZ. A study of productivity in a research setting.  
EVA GOODENOUGH. A forced choice test for measuring maturity of attitudes toward college, college work, and college teachers.  
WILLIAM F. BROWN AND CARSON MCGUIRE. Peer group affiliation and college achievement.  
ROBERT F. ANDERSON AND JAMES E. KUNTZ. Use of the B & H Survey of Study Habits in a college counseling center.

### Section G. Learning 2

HARDY C. WILCOXON, Chairman

- A. C. PEREBOOM. Alternating and retracing in the rat.  
TRUETT ALLISON, SYLVAN J. KAPLAN, AND KENNETH S. MCCUTCHAN. The relative importance of brightness and form in multiple discrimination learning by monkeys.  
KEN DAVIS, PETER CHANDLER, AND IRENE MACKINTOSH. The effect of an alternative response on the rate of extinction.  
KENNETH S. MCCUTCHAN AND EDWARD S. HALAS. Some effects of spatial opposition in maze learning. (Sponsored by SYLVAN J. KAPLAN)

### Symposium 5. Recent Research and Applications in the Field of Hypnosis

JAMES L. McCARY, Chairman

- HAROLD B. CRASILNECK. Use of hypnosis as a method of anesthesia.  
JACK TRACTIR. Hypnosis as a research instrument in the study of emotions.  
J. L. McCARY. Use of hypnosis in the field of dentistry.

### Section H. Learning 3

J. R. STRANGE, Chairman

- WESLEY D. DAVIS. A study of the effects of complex transformations of feedback upon simple instrumental behavior. (Sponsored by M. P. WILLIS)  
ALVIN J. NORTH. Acquired distinctiveness of form stimuli.  
KELLER BRELAND. An experimental test of contiguity theory.  
IRENE MACKINTOSH. Theoretical predictions and response measures for irregular learning conditions.



**Section I. Physiological 2**

W. LYNN BROWN, Chairman

WILLIAM H. MELCHING AND KENNETH S. MCCUTCHAN. Effect of diet and stress on arterio sclerosis in cockerels.

W. W. GOOD, MAC STERLING, AND WAYNE HOLTZMAN. Termination of chlorpromazine with schizophrenic patients.

ARNOLD A. McDOWELL. Facilitative effects of irradiation on performance of monkeys on discrimination problems with reduced stimulus cues. (Sponsored by W. LYNN BROWN)

ROY GLADSTONE. A correction for the effect of varying thermal conditions upon the measurement of palmar sweat.

**Section J. Personality 3**

E. O. WOOD, Chairman

EUGENE L. GAIER AND MARY JEFFERY COLLIER. The male role in preferred childhood stories.

MARGARET K. BODY. Anxiety in preschool children from broken homes. (Sponsored by IRWIN A. BERG.)

FRED C. FOX AND KENNETH L. BEAN. A sound apperception test applied to blind persons.

LYLE DEAN KAAPKE. Anxiety, adjustment, and intelligence factors in student performance in initial jet pilot training. (Sponsored by E. O. WOOD)

**Section K. Assessment and Prediction 2**

HAROLD B. CRASILNECK, Chairman

WILLIAM F. BROWN AND CARSON MCGUIRE. Biographical data as a predictor of academic achievement.

JAMES E. KUNTZ AND CLYDE T. JETTON. Extent of use and appraisal of occupational literature and/or services by high school counselors in four southwestern states.

H. GREENBERG, C. MARVIN, AND B. BIVINS. Authoritarianism as a variable in motivation to attend college.

**Panel Discussion 2. What the Student Expects of His Psychology Department in His Preparation as a Psychologist**

BOB SMITH, Chairman

Representatives from selected universities. (Sponsored by Psi Chi)

## PROCEEDINGS OF THE THIRD ANNUAL MEETING OF THE SOUTHEASTERN PSYCHOLOGICAL ASSOCIATION

M. C. LANGHORNE, Secretary-Treasurer  
*Emory University*

THE Southeastern Psychological Association held its third Annual Meeting March 28-30, 1957, Nashville, Tennessee, with 275 persons registering. Fisk University, George Peabody College, and Vanderbilt University were sponsors. The program consisted of an invited address "Psychology and Mental Health" by Fillmore H. Sanford, Joint Commission on Mental Illness and Health; three presentations of programmatic research, one workshop, five symposia, and 34 papers.

The Presidential Address, "Motivation to High Achievement," was presented by Nicholas Hobbs of George Peabody College. The address was followed by the Annual Business Meeting.

The Program Committee consisted of Gregory A. Kimble, Chairman; E. E. Jones, G. T. Lodge, O. A. Parsons, and E. H. Rodnick. Local arrangements were handled efficiently by Gilbert W. Meier, Chairman, who was assisted by Rue L. Cromwell, and S. O. Roberts. The Election Committee was composed of John B. Wolfe, Chairman; John B. Morris, and Malcolm H. Robertson. The Auditing Committee consisted of R. A. Goodling, Chairman; R. E. Adamson, and R. S. Albert. Rue L. Cromwell was in charge of placement.

Officers for 1957-58 are Edward E. Cureton, President; W. N. Kellogg, President-elect; M. C. Langhorne, Secretary-Treasurer (1955-58). Members-at-large on the Executive Committee are C. H. Calhoun (1955-58), Dorothy C. Adkins (1956-59), and Eliot H. Rodnick (1957-60).

The report of the Secretary included the following items:

a. A report that members of the association had voted in favor of amending the Constitution, Article V, Section 2, to include the immediate past president as a member of the Executive Committee.

b. A statement that the members had voted by mail to hold the fourth Annual Meeting on Sunday, Monday, and Tuesday, April 27-29, 1958, Biltmore Hotel, Atlanta, Georgia.

c. Reading the names of the two SEPA members, Vera Kennedy, and W. W. Rogers, whose deaths were memorialized by the members.

d. An announcement that an active recruitment campaign, consisting of letters to all departmental chairmen in the region whose departments offered graduate work in psychology reminding them of the student-affiliate status open to their graduate students, and mailing printed programs with enclosed membership invitations, to the 1,250 APA members in the region who were not SEPA members had helped to bring in 32 new members. New members for 1956-57 were:

### FULL MEMBERS

R. E. Adamson	J. D. Lyons
R. S. Albert	Ann S. McColskey
Theron Alexander	H. G. Miller
H. W. Andersen	K. F. Mosman
R. J. Anderson	N. R. Newton
F. N. Arnhoff	A. R. Orgel
O. R. Braman	C. A. Peachee, Jr.
N. W. Coppinger	Carolyn A. Pinkard
G. E. Copple	L. L. Reid
C. B. Ferster	S. O. Roberts
H. G. Ginott	B. D. Sisson
Marion T. Goldberg	William Sloan
M. A. Grodsky	Marion M. Stotz
G. C. Hall	W. J. Von Lackum
G. W. Levy	

### STUDENT AFFILIATE MEMBERS

W. S. Applegate	Catherine M. Newell
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### AFFILIATE MEMBER

Rita J. Wetzel

Report of the Treasurer listed receipts of \$1,587.14; expenditures of \$793.49; balance of \$793.65.

Dues for 1957-58 were set at \$2.00 for members and affiliate members, and \$1.00 for student affiliate members.

The membership voted to enforce the constitutional requirements for dropping members whose dues were in arrears for two consecutive years. It was voted to drop student affiliate members whose dues were one year in arrears.

A resolution expressing appreciation to the officers, members, committees, hotels, institutions, and agencies contributing their time and energies in making the third Annual Meeting a success was adopted by a rising vote.

## PROGRAM

## SPECIAL PROFESSIONAL EVENTS

Meeting of officers of state psychological associations in the region sponsored by the Conference of State Psychological Associations.

American Association of University Psychological Training Centers. Meeting of departmental chairmen and directors of clinical training.

Executive Committee and Council of the Council of Psychological Resources in the South.

Psi Chi regional meeting.

## PROGRAMMATIC RESEARCH

## George Peabody College for Teachers Mental Deficiency Program

GORDON N. CANTOR, *George Peabody College*, Chairman

Effects of reinforcement on stated expectancy in mental defectives. JAMES MOSS AND RUE L. CROMWELL, *George Peabody College*.

Effects of interpolated success and failure on motor task performance in mental defectives. WILLIAM I. GARDNER, *George Peabody College*.

The effect of visual stimulation on performance and activity in organics and familials. JAMES FOSHEE AND RUE L. CROMWELL, *George Peabody College*.

Motor task performance of high grade mentally defective males as a function of the amount of incentive. RICK HEBER, *George Peabody College*.

Pursuit rotor performance in mental defectives as a function of distribution of practice. CHARLES D. BARNETT AND GORDON N. CANTOR, *George Peabody College*.

## United States Naval School of Aviation Medicine: The "Normal" Psychology of the Naval School of Aviation Medicine

Participants. WILSE B. WEBB, W. F. O'CONNOR, PAUL KELLEY, AND MARSHALL B. JONES, *USN School of Aviation Medicine, Pensacola, Florida*.

## Duke University: Generalization and Discrimination in the Pigeon

WILLIAM O. JENKINS, *University of Tennessee*,  
Chairman

Participants. N. GUTTMAN, H. HANSON, W. K. HONIG, *Duke University*. (The presentation consisted of a live demonstration and progress report.)

## SYMPOSIA

## Psychology and Industrial Engineering

E. H. LOVELAND, *Georgia Institute of Technology*,  
Chairman

An industrial engineer looks at psychology. ROBERT LEHRER, *Georgia Institute of Technology*.

A psychologist looks at industrial engineering. M. CARR PAYNE, *Georgia Institute of Technology*.

Contributions of psychology to industrial engineering in Europe. NORBERT THUMB, *Technical University, Vienna, Austria*.

## Multidimensional Stimulus Scaling

ALBERT K. KURTZ, *University of Florida*, Chairman

Introduction to multidimensional scaling. JOHN MELLINGER, *University of North Carolina*.

Some problems in applications of various scaling methods. DONALD STILSON, *University of South Carolina*.

A survey of experimental applications. JOHN MELLINGER, *University of North Carolina*.

Evaluation of the validity of scaling. KELLOGG V. WILSON, *Duke University*.

## Problems of Teaching Psychology in Medical Schools

THOMAS W. RICHARDS, *Louisiana State University*,  
Chairman

Participants. O. A. PARSONS, *Duke University*, ARTHUR BACHRACH, *University of Virginia*, AND WILLIAM J. VON LACKUM, *University of Tennessee*.

## Non-Intellectual Factors in Academic Success.

L. D. COHEN, *Duke University*, Chairman

Participants. HENRY WEITZ, *Duke University*, JUNIUS A. DAVIS, *Emory University*, AND G. FREDERICK KUDER, *Duke University*.

## What Counts in Psychotherapy

RALPH M. DREGER, *Duval County Child Guidance and Speech Correction Clinic, Jacksonville, Florida*,  
Chairman

The process within the client. JULIUS SEEMAN, *George Peabody College*.

"A process psychotherapy." HERMAN SORKEY, *Asheville, N. C.*



The child therapist—his qualities and qualifications.

HAIM G. GINOTT, *Duval County Child Guidance and Speech Correction Clinic, Jacksonville, Florida.*

The effect of reinforcement on Rorschach movement responses. MICHAEL DINHOFF AND T. D. STERLING, *University of Alabama.*

### WORKSHOP

#### Profile Interpretation of the Minnesota Multiphasic Personality Inventory

EARL BAUGHMAN, *University of North Carolina, Chairman*

Special considerations in the interpretation of floating profiles. PASCHAL N. STRONG, *V. A. Hospital, Durham, N. C.*

Personality processes reflected in the MMPI profile. CHARLES D. SPIELBERGER, *Duke University.*

The influence of response sets on the MMPI. W. GRANT DAHLSTROM, *University of North Carolina.*

#### Parental Attitudes and the Self Concept

HERMAN SORKEY, *Asheville, North Carolina, Chairman*

Factor analysis of parent attitude scale. R. M. DREGER AND A. SWEETLAND, *Duval County Child Guidance and Speech Correction Clinic, Jacksonville, Florida.*

Identification, parent-cathexis and self esteem. S. M. JOURARD, *University of Alabama Medical Center.*

Relationships among personal beliefs. R. E. BILLS, *Alabama Polytechnic Institute.*

The relationships among selected aspects of variability and personality. M. H. ROBERTSON, *University of Mississippi.*

### PAPER SESSIONS

#### Social

MILTON ROSENBAUM, *University of North Carolina, Chairman*

A comparison of certain characteristics of white and Negro teachers in a large southeastern school system. JAMES E. GREENE, *University of Georgia.*

Variations in arithmetic achievement of white and Negro children of the same mental ages and chronological ages. R. T. OSBORNE, BROOKE JOHNSON, AND WILMA B. SANDERS, *University of Georgia.*

Correlation analysis in level of aspiration research. WINTON H. MANNING, *Washington University.*

The influence of degree of conformity and general reasoning ability on independent conclusion-drawing from a neutral mass communication. R. S. ALBERT, B. J. FINE, AND JANET CHRISTENSEN, *Emory University.*

#### Projective Tests

G. T. LODGE, *VA Hospital, Tuskegee Alabama, Chairman*

Increasing ambiguity in the TAT. DELL LEBO AND MARGARET HARRISON, *Richmond Professional Institute.*

Rorschach relationships with intelligence among familial mental defectives. D. P. OGDON, *Richmond Professional Institute.*

On the use of Rorschach determinants in cross-cultural research. A. W. SIEGMAN, *University of North Carolina.*

#### Organic Impairment

JOHN HORNADAY, *Greensboro College, Chairman*

Impairment of abstracting ability in multiple sclerosis. O. A. PARSONS, K. D. STEWART, AND D. ARENBERG, *Duke University.*

A replication of the Price and Deabler study on diagnosis of organicity by means of the spinal after-effect. P. N. STRONG AND R. L. VAN DE CASTLE, *VA Hospital, Durham, N. C.*

A digit-symbol test for assessing learning, memory, and flexibility. P. N. STRONG, *VA Hospital, Durham, N. C.*

An evaluation of "organic signs" in the H-T-P drawings. V. J. BIELIAUSKAS AND SANDRA KIRKHAM, *Richmond Professional Institute.*

#### Animal Behavior

JOEL GREENSPOON, *Florida State University, Chairman*

Hoarding and systematically controlled pre-test experience. WILLIAM BEVAN, JR., AND MILTON GRODSKY, *Emory University.*

A technique for recording response patterns from the small mammalian fetus in utero. W. M. DAWSON, *Florida State University.*

Modification of behavioral activity by subcortically induced seizures. RALPH M. CHINN AND O. J. ANDY, *University of Mississippi Medical Center.*

#### Human Learning

EDWARD A. BILODEAU, *Tulane University, Chairman*

Human delayed reward learning under two conditions of task length. C. E. NOBLE, *Louisiana State University.*

Variables determining multiple task performance. R. H. HENNEMAN AND K. E. LLOYD, *University of Virginia*.

Meaningfulness and association value in paired-associate syllable learning. C. E. NOBLE, F. E. STOCKWELL, AND MARGARET W. PREYER, *Louisiana State University*.

The relationship between two measures of stimulus generalization: The influence of intelligence upon performance. F. N. ARNHOF, *V. A. Hospital, Salisbury, N. C.*

#### Animal Learning and Motivation

JOHN M. BEVAN, *Davidson College*, Chairman

Eating as dependent upon environmental cues. P. S. SIEGEL AND T. D. STERLING, *University of Alabama*.

Goal box cues at the choice point. J. B. WOLFE, *University of Mississippi*.

Quantity of reward as a factor in maze learning. E. FURCHTGOTT, H. C. SALZBERG, AND W. A. YOUNG, *University of Tennessee*.

Prediction of behavior in a free and in a patterned situation. E. W. MENZEL AND G. W. MEIER, *Vanderbilt University*.

#### Applied Psychology

M. CARR PAYNE, *Georgia Institute of Technology*, Chairman

The systematic progression of job duties across grades as observed during a job analysis. H. L. MCADOO AND E. S. PRIMOFF, *U. S. Civil Service Commission, Washington, D. C.*

Reality testing in a complex prediction situation. G. D. MAYO, *Naval Air Station, Memphis, Tennessee*.

Personality differences on a "degree of commitment" variable. I. GUTTMAN, *Naval Air Station, Memphis, Tenn.*

How supervise? as a prediction for new and experienced foremen. JOHN B. MORRIS, *University of Mississippi*.

#### Ability

BURKE SMITH, *Roanoke VA Hospital*, Chairman

A validation of a combination of two tests purported to be free of social status bias. O. LUCIER AND J. FARLEY, *Richmond Professional Institute*.

Emotional contacts with the external world manifested by highly creative chemists and mathematicians. P. I. CLIFFORD, *Atlanta University*.

A technique for measuring minimal social behavior. A. FARINA AND D. ARENBERG, *Duke University*, S. GUSKIN, *University of North Carolina*.

# PROCEEDINGS OF THE FORTY-NINTH ANNUAL MEETING OF THE SOUTHERN SOCIETY FOR PHILOSOPHY AND PSYCHOLOGY

WILSE B. WEBB, Secretary  
*U. S. Naval School of Aviation Medicine*

THE Forty-ninth Annual Meeting of the Southern Society for Philosophy and Psychology was held in Knoxville, Tennessee, April 18, 19, and 20, 1957. The Departments of Philosophy and Psychology of the University of Tennessee were hosts to the convention.

Thirty-four papers were presented in eight psychology sessions. The sessions were: Learning I and II, Physiological Psychology, Sensory and Perceptual Processes I and II, Theoretical Psychology, Behavioral Disorders, and Industrial Psychology. The authors and co-authors of the papers were:

James Cronholm	Francis J. Farese
Milton A. Grodsky	Janet L. Noble
Isaac Behar	Wayne T. Alcock
William W. Dawson	Carl E. Sherrick, Jr.
John M. Bevan	John P. Nafe
James M. Whitehouse	Daniel R. Kenshalo
Girard W. Levy	Ernest Furchtgott
Kenneth E. Moyer	R. Travis Osborne
John A. Hornaday	Charles Kiker
John K. Wilson	B. vonHaller Gilmer
John R. Peck	DeWitt E. Carroll
Theodore P. Zahn	Henry F. Dickenson
Milton B. Jensen	Edward Newberry
Elizabeth Z. Johnson	Thomas F. Gilbert
Farnum T. Crawford	Sheldon J. Lachman
Loh Seng Tsai	Robert S. Albert
William T. James	Howard D. Baker
Arthur J. Riopelle	Warren W. Willingham
George A. Churukian	Wilse B. Webb
Clyde E. Noble	

Twenty-five papers in philosophy were presented in seven sessions. Mimeographed lists of these papers may be obtained from the secretary.

A joint philosophy-psychology session was devoted to the problem of "The adequacy of a neurological theory of perception" with papers by Karl Zener and Everett Hall, and discussion by Richard Henneman and Charles Hartshorne.

The program committee for psychology was composed of William Bevan, R. A. Goodling, Katherine Omwake, M. C. Payne, and A. J. Riopelle.

At the business meeting, Richard H. Henneman was elected President of the society. William M. Hinton was elected as a psychologist to the Council. Arthur Irion, Rolland Waters, Wilse B. Webb (Secretary), and Sam C. Webb (Treasurer) continue as psychologists on the Council.

The following psychologists were elected to full membership: F. T. Crawford, W. H. Enneis, T. F. Gilbert, J. A. Hammes, S. J. Lachman, H. G. Miller, M. C. Payne, Jr., J. P. Rogers, and W. W. Willingham. The following psychologists were elected to associate membership: R. M. Chinn, D. A. Lord, R. L. Rhyne, and J. E. Susky.

Past Presidents Marion Bunch and William Weedon were appointed to co-chair a special activities committee concerned with preparation of the semi-centennial meeting next year to be held in Nashville, Tennessee with the Departments of Psychology and Philosophy of Vanderbilt University serving as hosts.

John Paul Nafe, psychologist, and Albert Balz, philosopher, were elected as the society's first life members under certain constitutional amendments.



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# Psychology in Action

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## HUMAN FACTORS RESEARCH IN THE AIRCRAFT INDUSTRY

JACK A. KRAFT

*Lockheed Aircraft—Georgia Division*

AND

JAMES M. VANDERPLAS<sup>1</sup>

*Washington University*

Human factors research, though far from a new field of interest, has received increasingly greater support from industry and government services since World War II. These organizations frequently label this research: human engineering, engineering psychology, man-machine systems analysis, or biotechnology. The ultimate purpose of this activity, in addition to establishing the characteristics and limits of the sensory and intellectual capacities of man, is to increase the efficiency of the man-machine system through modification of the machine portion of the system in order to utilize a greater proportion of the available man power and to enable the man to perform his tasks efficiently, safely, and comfortably with a minimum of training.

The Army, Navy, and Air Force have maintained human factors research programs with varying emphases and magnitudes for more than 15 years. However, the formal organization of such programs in the aircraft industry is relatively recent.

### PURPOSE OF SURVEY

In an effort to determine how widespread this research activity is in the airframe and supporting industries and to determine the functional location and professional make-up of these groups, a survey<sup>2</sup> questionnaire was mailed to 40 representative companies. The questionnaire was specifically designed to determine the existence of a formal human factors research program, its date of origin, title, organizational position, number and specialization of personnel, type of services provided, type of unclassified research projects, and whether the research was partially supported by outside agencies.

The summary of the survey results should be of interest to persons engaged in human factors research

or contemplating such a career in industry, as well as to companies considering the establishment of such a program.

### FINDINGS

Of the 40 companies contacted during August and September 1956, a total of 32 responded (80%). Virtually all of the larger companies contacted returned the questionnaire.

*Organized Programs.* Twenty-four of the respondent companies have organized a human factors research program, six are in process of doing so, one utilizes consultants for this service, and one did not indicate plans for establishing a program in the foreseeable future.

*Organizational Titles.* Of the 24 companies with programs, 17 use the words, human engineering or human factors, in the organizational title—6 using the former and 11 the latter. The titles used by the remainder more closely identify the area of engineering activity, such as Staff Reliability, Equipment and Safety Research, Cockpit Research and Development, Equipment Operations, Operations Research, and Systems and Controls. Judging from the titles, this research is conducted as part of the engineering activities.

*Functional Responsibility and Reporting Level.* Fourteen of the 24 companies appear to have line responsibility within the engineering program, and 10 have primarily staff functions. Two of the staff programs are part of the operations research effort, five are part of staff or technical services engineering, and three are specifically identified with research and development programs. Twenty-seven of all respondents indicated participation in consulting activities, 25 in design, 23 in applied experimentation, and 12 in basic experimentation.

The reporting level of the human factors research groups is difficult to determine without complete organizational information. However, of the 22 who supplied organizational information, at least one group reports directly to the Chief Engineer, three report to the Chief Design or Projects Engineer, seven report to division level, six report to department level, and the remaining five report to section level. If the assumption can be made that the structures are ranked from

<sup>1</sup> Human Engineering Consultant, Human Engineering Department, Lockheed Aircraft Corporation, Marietta, Georgia.

<sup>2</sup> This survey has much in common with one by C. I. Barron (Medical Director, Lockheed Aircraft Corporation—California Division) to determine the utilization of aeromedical and human factors personnel in industry. A report of his findings appears in the June 1956 issue of the *Journal of Aviation Medicine*.

Chief Engineer (Branch) down to division, department, section, and group (as they are at Lockheed), we may conclude that at least half of the groups report to high levels within the company. From this conclusion one can infer the degree of importance attached to this research function, especially if one considers its newness in the aircraft industry.

*Size and Professional Make-up of Human Factors Research Groups.* The following presents the group size and professional specialties represented:

SIZE	
Range (professional and technical personnel)	1-32
Mean	8.6
Median	6
Mode	4
Mean Projected Growth (number of personnel to be added)	7.8

SPECIALTY	
Psychologists	61
Engineers	57
Physiologists	8
Physicists	4
Aeromedical Specialists (MD)	4
Industrial Designers	1
Anthropologists	1
Pilots	2
Technicians	20
Logicians	1
Operations Analysts	2
Mathematicians	1
Administrative Personnel	4

Over 207 professional and technical personnel are employed in the programs discussed, but some respondents failed to identify the specialties. Although the specialization within each profession was not always indicated, previous contacts with these groups suggest that the psychologists are primarily in experimental, physiological, and industrial specialties, with some educational and clinical psychologists mentioned. The engineers are primarily in aeronautical, electrical, mechanical, and industrial specialties.

*Project Activity.* Of the 29 companies which responded to the question, "Does your group perform independent contract work for outside agencies?" 12 replied that they do, while 17 stated they do not.

The list of project activity which follows is a sample of the type of research reported by the various groups:

- Display and Control Development
  - Helicopter instrument evaluation
  - Army-Navy integrated instrument program
  - Audible information display
  - Quickening and unburdening studies
  - Basic perceptual studies
  - Manual control studies
- Escape and Survival Systems Development
  - High altitude escape
  - Emergency ground escape
  - Capsule escape

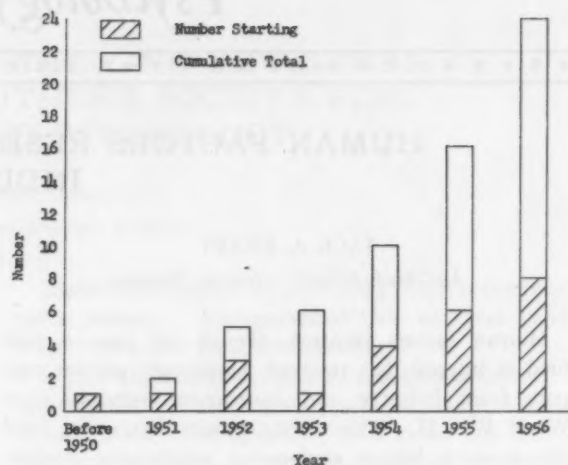


Figure 1. Number of companies with established programs.

- Physiological and Psychological Effects of Environment
- Effects of high altitude flight
- Aircrew stress and fatigue during extended endurance flight
- Acoustical studies
- Information Transmission and Communication
- Coding information
- Decision making
- Qualitative Personnel Requirements Research
- Assignment of crew duties
- Task equipment analyses
- Personal Equipment Development
- Flight Safety Research

The above list is not intended to be all-inclusive since several respondents failed to mention their research activity. However, it appears to represent the type of studies being currently conducted.

*Date of Establishment.* Figure 1 presents the growth of human factors research activities in airframe and related industries since 1945. It is apparent that the greatest rate of growth has been in the last three years, coincidental with the increasing emphasis on the weapon system concept in aircraft development. It may be postulated that many of the same factors which generated the need for the weapon system concept also focused attention on the need for organized human factors research.

#### CONCLUSIONS

The findings are based on a small segment of manufacturing facilities conducting human factors research as part of their activities. It is hoped that future surveys in this area will have broader coverage. A number of conclusions can, however, be drawn from the results of this study.

With the exception of but a few, the major producers of airframe and supporting equipment have organized or plan to organize human factors research

programs. These groups have been established in recent years, and they have relatively small staffs of highly trained professional and technical personnel at present. Most of the groups report to reasonably high level supervision in the organizational structure. They function in both staff and line capacities, and they engage in a broad variety of research activity. They employ primarily teams of psychologists and engineers, in approximately equal numbers; and they utilize physiologists, physicists, anthropologists, industrial designers, technicians, aeromedical specialists, pilots, and system analysts in smaller numbers.

Major activities of human factors teams can be

categorized principally as consulting, equipment and system design, and applied experimentation, with somewhat limited basic experimentation taking place. It was noted, however, by most respondents, that plans for more basic research are being made, and most of the groups have definite plans for expansion of personnel allotments and greater variety of activities.

These results present an encouraging picture for the ultimate users of aircraft equipment. Though many human factors problems remain unsolved and though future development will create new ones, it is reassuring to note that identifiable progress is being made to anticipate and solve these problems.

## THE PROGRAM IN PSYCHOLOGY AT THE UNITED STATES AIR FORCE ACADEMY

GABRIEL D. OFIESH

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Although the academic program of the United States Air Force Academy (USAFA) is similar to that of other service academies, it differs considerably both because of its emphasis on professional air requirements as contrasted with land and sea requirements and because the curriculum of USAFA places heavy emphasis on humanities and social sciences. In developing the program of instruction, the planners have been constantly aware of the diversified attributes which will be required of the Air Force officer of tomorrow. Knowledge of our country and its relations and interactions with foreign countries is essential to effective military action. USAFA cannot afford to produce men with a good grasp of strategy and tactics but who lack a clear understanding of the political, economic, and human factors that underlie the problems of our time. Men must be produced who are trained for the conduct of war in the broadest sense because today there is not a facet of governmental structure, economic life, or social relations which remains untouched in war. In the light of this requirement, the mission of USAFA is stated as follows:

This mission of the Air Force Academy is to provide instruction, experience, and motivation to each cadet so that he will graduate with the knowledge and the qualities of leadership required of an officer in the United States Air Force, and with a basis for continued development through-

out a lifetime of service to his country, leading to readiness for responsibilities as a future air commander.

The entire program is divided into two major phases: The Airmanship Program, which comes under the direction of the Commandant of Cadets, and the Academic Program, which comes under the supervision of the Dean of Faculty. The Airmanship Program may be described as that part of the curriculum dealing directly with military training, including leadership, navigation, preliminary pilot training, administration of military affairs, and physical conditioning. A graduate of USAFA is awarded a commission as a Second Lieutenant, becomes a rated navigator, and is awarded a BS degree. The academic curriculum contains: Humanities, 38 hours; Social Science, 27 hours; Basic Sciences, 35 hours; and Applied Sciences, 29 hours—making a total of 129 semester hours. The Airmanship Program totals 38¼ hours, making a complete total of 167¼ semester hours for the complete program.

The mission of the Academic Program may be summarized as follows:

(a) To provide integrated instruction in the arts and sciences; (b) To provide such instruction in academic subjects required to support the Airmanship Program; (c) To encourage original thinking and to develop the basis for accurate observation, critical thinking, logical reasoning, and effective communication; (d) To increase in each cadet the understanding of himself, his culture, his country, and his world; (e) To develop an appreciation of air power, of its role in national security, and of the technology which supports it; (f) To foster, by precept and example, the development of habits and attributes considered essential

<sup>1</sup> I am much indebted to the following members of the Department of Psychology at the USAF Academy for their assistance and guidance in preparing this paper: Fred E. Holdrege, V. J. Ferrari, C. M. Seeger, H. E. Roadman, G. K. Cantrell, and Daniel G. Brown.



for leadership in the Air Force; (g) To encourage each cadet to devote a lifetime career of service to his country.

The Department of Psychology is charged with the responsibility for supporting the USAFA mission by providing the cadet with academic instruction in the principles of psychology, developing his capabilities for effective Air Force leadership, providing him with an appreciation of those psychological factors which contribute to successful living, and developing within him an appreciation of the human element in American air power.

In attempting to lay the foundation for the accomplishment of this mission, particular consideration has been given to the question: "What should be the objectives and educational goals for the course of instruction in psychology?" Particularly valuable and helpful in contributing to the establishment of objectives and content of the course in psychology have been the Cornell report, *Improving Undergraduate Instruction in Psychology* (2), and the review by Birney and McKeachie (1) of research work in the area of teaching psychology. Following the suggestion of the latter, the attempt has been made to formulate learning outcomes or educational goals for the USAFA course in terms of knowledge and understandings, habits and skills, and attitudes and values:

#### KNOWLEDGE AND UNDERSTANDINGS

The basic principles of psychology and a representative sample of the subject matter of psychology; the psychological foundations of effective military leadership in a democratic society; the methods of science as they apply to the study of human behavior.

#### HABITS AND SKILLS

To approach the problems of human behavior within a scientific frame of reference; to increase the objectivity and accuracy of observing human activity; to be able to apply sound psychological techniques to the problems of leadership and the management of human beings.

#### ATTITUDES AND VALUES

To develop curiosity about human behavior and an interest in the major aspects of human personality; to develop an appreciation of individual differences in the motivational basis of human behavior and a conception of all behaviors as natural phenomena; to develop the capacity for empathy and understanding in dealing with others and a respect for one's fellow man.

Once the aims and objectives had been established, the next problem had to do with the content of the course. In working on this problem, it was recognized that the cadets would study psychology for approximately 83 classroom hours of instruction in their Sophomore year and would be required to study 80-100 minutes for every hour of classroom instruction. It was also recognized that in a full curriculum there was no opportunity for providing the student with any further advanced training in psychology. This would

be his one and only course in psychology at USAFA and probably the only source of stimulation in helping him develop a respect for psychology and a scientific interest in human behavior. On the other hand, it is possible that such a course might be the source of an attitude of indifference, rejection, or futility to psychology, psychologists, and the whole effort to study behavior scientifically. In short, one aim should be to provide a basis for the student to develop a favorable attitude to psychological science in general and to its role and function in the Air Force in particular.

The attitude of the faculty members in psychology to the problem of orientation in the introductory course was simply that psychology should be presented as a science, a unique science in that many of its applications have direct relevance to the student's self-understanding and his relationships to other people. There was no desire nor was there any intention of "weakening" in any way the presentation of psychology. On the contrary, every effort was made to give the cadet a thorough survey of the basic methods, facts, principles, understandings, and applications of scientific psychology. It was felt that the respectability of psychology as a scientific discipline and its presentation as such is *not* incompatible with relating it to the general and particular needs and problems of cadets. Furthermore, it was recognized that the entire Academic Program will be continuously scrutinized and evaluated not only by the academic staff of USAFA but by representatives from the academic world at large, professional military leaders, congressional members, and other visitors who are concerned with the success of the mission of USAFA.

With the above considerations in mind, the following outline of the course content was adopted:

#### Psychology 201—BASIC PSYCHOLOGY

Introduction (2 hours), Scientific Method and Measurement (5 hours), Individual Differences (4 hours), Growth and Development (5 hours), Motivation, Emotion, and Perception (6 hours), Learning and Thinking (6 hours), Adjustment and Personality (9 hours). Total: 37 hours.

#### Psychology 202—PSYCHOLOGY IN THE AIR FORCE

Engineering Psychology (9 hours): flying safety, weapon system design, environmental factors in flying safety, experimenting with people, control loop integration, design of controls, and methods of system analysis.

Personnel Psychology (7 hours): personnel selection, job training and training methods, demonstration of training devices, and personnel evaluation.

Leadership (15 hours): psychological aspects of mission accomplishment, group dynamics, problem solving, communication, attitudes, motivation, morale, counseling, and personality.

Problems of Military Adjustment (11 hours): clinical psychology and psychiatry in the Air Force, anxiety, stress, and psychosomatic relationships; the nature and meaning of neuroses and combat stress; POW status and brain-

washing; marriage and the family, prejudice and problems of integration; mental health and the Air Force Officer.

Total: 42 hours.

Provision was made to discuss and understand the nature and importance of group dynamics in that portion of the second semester program dealing with the psychological principles of leadership and supervision. Much of this material was directly related to concrete problems in the Air Force and served as an illustration of basic behavioral concepts. Under the leadership phase of the course, emphasis was put on the necessity for understanding the perceived needs of others so that they may be motivated to accomplish the Air Force mission. While it is agreed that there are no cut and dried solutions to this problem, there is a necessity, in order for the cadet to become an effective leader, to be aware of the difference between the physical world and the world as perceived by each individual.

By the use of provocative and stimulating examples and illustrative materials throughout the course of instruction it is hoped that the accomplishment of the objectives and learning outcomes defined above will be facilitated, and, at the same time, the student will become familiar with specific problems of the Air Force. Although the first semester of the course in psychology does not contain a special section devoted to psychological research in the Air Force as such, actually this topic is discussed throughout the entire course as various psychological subjects are presented. A continuous effort is made to relate psychological principles to human problems that exist in the Air Force. It is difficult to imagine any basic concept in psychology that cannot be communicated through a provocative, stimulating Air Force problem as a vehicle for explanation and discussion. If through this approach an interest in psychological concepts that underlie many problems can be instilled and maintained, it would then be possible to provide the cadet with the basis for further reinforcement throughout his future career.

Students are encouraged to bring to class illustrative material from newspapers, experiences in service, and from other courses. Instructors supply their own interpretation of such material only after the students have been given full opportunity to discuss the material among themselves. Students are also encouraged to prepare objective test items which they think tie into the objectives of the course or classroom materials. Such items are screened and used in examinations.

Another resource that is used liberally is psychological films. The particular need in this area appears to be for 15- to 20-minute films that can be appropriately used in one-hour lessons and still allow time in the class for the instructor to make necessary applications to the basic course content, needs of the cadets, and the problems of the Air Force.

Because the academic setting is in a military atmosphere, some may assume that there is an absence of informality in the classroom and a negation of the type of learning situation most conducive to student growth and achievement. Actually just the opposite academic climate prevails at USAFA. The student is very much at ease, is urged to verbalize and think for himself, and, when appropriate, is expected to question the authority of the textbook or the instructor. With a class of only 12 students and an emphasis on a relaxed, informal learning climate, it would be difficult for the officer-instructor to be successful in his teaching if his techniques are rigid and autocratic.

The plan, as it is commonly practiced throughout USAFA, is to shift instructors not only at the end of the first semester but to a limited degree throughout the academic year. Effort is made to allow all students to have some contact throughout the academic year with each of the seven instructors in the department. Lesson conferences are held prior to and following each lesson to discuss lesson objectives, teaching methods, evaluative procedures, etc. Mutual visiting by instructors is encouraged. Both the Professor and Associate Professor of Psychology relieve instructors periodically to permit them to visit other classes; they also make frequent visits to the classes of the various instructors in addition to participating in the instruction program.

A difficulty that must be faced and dealt with is the fact that even though the objectives for the course in psychology may be sound, idealistic, and possibly even attainable, there seems to be no adequate means of measuring the degree to which the goals and objectives of the course have been achieved. Every effort will be made, however, to make as accurate an appraisal as possible of the course outcomes. The instructor will develop many new insights that should not be ignored. He will have a total of 48 students each year; he will see them three times a week in groups of 12. Personal records on each cadet will be available to the instructor. All of this should assist him in developing a better understanding and making a more effective evaluation of the cadet. The instructor's opinions and confidence or lack of confidence in the progress of the class should be of interest and should be noted. Also, firsthand observations should be made of the applications and use that students are able to make of the basic facts, concepts, and principles of psychology. It should be possible for the instructor to maintain a close and continuing contact with his students outside as well as inside the classroom; and he should be able to develop procedures for determining changes in each cadet's peer ratings, the cadet's attitudes toward himself and toward others, how he is perceived by his fellow cadets, and what critical incidents arise in his ex-

perience that may reflect the transfer of the course of instruction.

Finally, with respect to long-term planning, members of the psychology department contemplate an extensive longitudinal study of the possible relationships between the program of work in psychology and the future performance and achievements of the cadet as an officer in the United States Air Force.

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## IMPLEMENTATION OF NEUROPSYCHIATRIC RESEARCH PROGRAMS

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The development and administration of research programs in neuropsychiatric hospitals has received increasing attention in recent psychiatric publications (1-3, 5, 6, 8, 9). Clinical psychologists have increasingly participated in such efforts during recent years, yet have written little about their contributions (7). This paper presents a philosophy of the *research service unit's* approach toward implementing neuropsychiatric research. This philosophy<sup>1</sup> gradually became crystallized at the Palo Alto VA Hospital through five years of practical research experience, and it is being applied in the development of the neuropsychiatric research program at the Chicago VA Research Hospital.

A research service unit is defined here as an informal and/or formal administrative staff developed to serve, train, and encourage the research efforts of the entire professional hospital staff or of a division. The unit may consist of professional specialists, research clerks and laboratory assistants, consultants, statistical workers, and secretarial help. Such a research service unit may be contrasted with the traditional research laboratory primarily by difference in functions. In most research laboratories, professional specialists develop a research staff whose major function is to serve and facilitate the research efforts of the research workers *within* the laboratory. These specialists, of course, assist frequently the research efforts of other professional workers in the parent organization, but this is not their primary function. In one sense, the research laboratory is expected to be the primary research *producing* unit within the organization. However, a research service

unit is viewed as not having the primary research-producing role, regardless of the individual productivity of its members. Rather, the professional staff as a whole has the task of producing research spread among its larger number of personnel. In addition, it is felt that a research service unit may serve the total research, service, and administrative needs of a neuropsychiatric program better in some ways than the traditional research laboratory—although it is by no means implied that a research laboratory has no place in a neuropsychiatric hospital program. Ideally, both types of unit are needed and jointly represent a stronger program than either separately.

What, then, is the rationale for the development of a research service unit? Basically, the rationale springs from the conviction that each professional worker is potentially capable of having creative, pertinent, and vital ideas about what we need to know in our sciences. Whether he lacks some of the needed technical knowledge and skills of the professional researchers is secondary to this basic potential. Next, a research laboratory can all too frequently become isolated and insulated from the service and administrative needs of a hospital; such isolation can lead to sterile research. Service personnel, while oriented mainly to practical functions, may stimulate both applied and theoretical research. Seemingly, the feedback of applied research to the theoretical is as great, if not greater, in our social and medical sciences than in the physical sciences. Finally, in view of the limited funds available for neuropsychiatric research, the diversity of professional and technical backgrounds of the staff usually is greater than that which can be afforded in a research laboratory. Service to all the specialties represented in the hospital may also result in more interdisciplinary research than is possible with traditional laboratory programs.

<sup>1</sup> The primary impetus of this approach to neuropsychiatric research comes from Paul McReynolds, Assistant Chief for Research, Clinical Psychology Service, VA Hospital, Palo Alto, California. The writer, as research assistant to McReynolds for three years, was responsible for much of the day-to-day supervision of the research service unit.



What are some of the pressing problems encountered in carrying out psychiatric research? Perhaps they can be viewed as hurdles which must be surmounted before completed research can be reported. Eight such problems are listed here:

1. Insuring sufficient time to carry out a research project.
2. Development of worthwhile research hypotheses.
3. Technical research and statistical skills demanded by present day standards.
4. The large body of existing psychological and medical literature bearing on neuropsychiatric research.
5. Amount of funds available for, and utilization of, equipment and facilities.
6. Demand for effective and efficient research design.
7. The task of collecting research data and their statistical analysis.
8. Preparation and presentation of research reports.

Some practical steps which can be taken by the research service unit toward solutions of the above problems will be noted:

*Attitude of Personnel and Time Allotted for Research.* While the decision whether personnel will be permitted research time is an administrative one, the creation of a productive research orientation and expectation of participating in research on the part of all the professional personnel is one step in securing a favorable administrative attitude. If the administrative staff is convinced that "Research at this hospital is a paying proposition," professional time will be allotted for research activities. Hence, one of the major functions of the research unit is that of demonstrating that research is a practical, worthwhile endeavor in "this" hospital. To reduce the total time needed to do worthwhile research is a second problem here. This is accomplished by the attempt to fractionate research time into its routine and creative aspects. Many research activities like recording Ss' names and test scores can be done by almost anyone, whereas the more creative aspects of research usually need specially trained professional personnel. To the extent the researcher can delegate the routine aspects of research to less technically trained workers and concentrate on the creative aspects of his project, the less total research time he will need. The research service unit has, then, the task of providing coverage of routine jobs in data gathering, tabulation, and analysis.

*Presentation and Discussion of New Developments.* There is a general saying that "The prepared mind is the one that discovers or invents." As indicated earlier, the writer believes rather strongly that service and administrative personnel, because they are working in close day-to-day contact with the problems involved in the practice of neuropsychiatry, are each potentially capable of fruitful research ideas. However, they frequently need added stimulation before developing research interests. Such stimuli may be new instrumen-

tation and new testing procedures, new therapy techniques, new administrative procedures, etc. Hence, a rather major function of research service unit personnel may be to present, demonstrate, and discuss with the hospital personnel as frequently as possible new developments in our respective sciences. Much of such activity can be informal.

*Methods of Training.* Related to the presentation of new instruments and service techniques is the problem of aiding service personnel to become more effective in their research efforts. Such training may be given in several ways: (a) Regular lectures on research design, methodology, statistics, and tools can be given yearly to the new psychiatric residents and other interested personnel. (b) Trainees may serve as research assistants to members of the psychology staff engaged in research and then carry out their own research projects. (c) Research manuals written for the inexperienced research workers may be used as an introductory text to research design, execution, or statistical analysis. (d) Nearby universities may permit personnel to attend certain graduate courses in the regular academic programs. Consultants from these universities may also give courses at the hospital to meet special research needs and interests.

In general, though, our experience indicates that these functions are served better through informal contacts than through the formal procedures described above. It has also been our frequent observation that a person who becomes aware of his technical lacks after he has become extremely interested in a particular research problem, frequently becomes a quick, strongly motivated learner.

*Assistance of Library for Up-To-Date Information.* The problem of keeping abreast of the developments in any of the psychological fields is an increasingly difficult one, especially for the part-time research worker. Most hospital personnel do well to read regularly the few journals which come to them through their memberships in their respective professional societies. A major function of the research unit, therefore, would be to assist hospital personnel in keeping up with their possible research interests. Official VA policy encourages attendance at scientific meetings. To supplement such opportunities, research seminars are held at frequent intervals at the hospital. The medical librarian can serve as an important assistant in this area (4). For example, he can prepare bibliographies and abstracts for research purposes. In addition, he could maintain a current continuous bibliography of any research topic if a member of the hospital staff so requests it. While such libraries are relatively small, careful and periodic evaluation of book and journal purchases by representatives of the various professions can insure that a good "working" library is maintained. Through in-

terlibrary loan facilities, additional books and journals can be quickly obtained to supplement what the local library cannot feasibly maintain. The writer has also found it useful to employ photostat equipment and a microfilm projector as library tools.

*Expenditures for Personnel and Equipment.* Operating under the typical limited research budget, careful expenditure of funds for equipment and personnel is of utmost necessity. Since each sizable expenditure of research funds must be approved by a VA research committee, the unit with which the writer is familiar tries, as far as possible, to purchase equipment that has potential reuse value beyond the study for which it was specifically requested. The research committee also should take a similar attitude in regard to personnel hired under the research budget. Each such person is hired with the view to his potential usefulness to the research program as a whole rather than strictly in terms of his usefulness to a particular research study. Periodically, the hospital staff is informed and urged to use for research purposes the equipment and personnel time available.

*Effective and Efficient Research Design.* The need for careful research design, preplanning and testing of experimental procedures, designation of statistical tools to be employed, and the formulation of adequate hypotheses are all essential ingredients to a good research study. The professional personnel of the research service unit are available for advice and guidance to interested personnel. If the problem is unusually complex and difficult, hospital consultants may also be called in to assist.

*Aid of Volunteer Help.* A unique feature of the research service unit at the Palo Alto VA Hospital is its volunteer statistical laboratory. This group of volunteers, coming both from the community and from the patient population, carries out the bulk of statistical analyses. Their presence enables any research worker to turn over his data to the research service unit for analysis. Of course, it is the research worker's responsibility to designate what statistical procedures should be applied—not that of the volunteer worker. During the past four years, the psychology staff has been able to develop a series of methods for cross-checking the accuracy of such analysis which permit them to have confidence in the output of these relatively untrained workers. A research clerk, hired from

research funds, works on the collection of data from the diverse clinical records. As in the case of the volunteer statistical workers, this clerk's services tend to free the research worker from the routine repetitive aspects of his study. A research laboratory technician also serves in much the same way in the research program.

*Preparation and Publication of Research Reports.* The preparation and publication of research reports is also a frequent stumbling block in carrying out research. To aid in such efforts, the professional members of the service unit give editorial assistance when requested. A research secretary experienced in the preparation of reports for medical and psychological journals prepares typescripts to be submitted for publication. The service unit should maintain drafting, lettering, photographic, and photostatic equipment for the preparation of graphs, charts, and photographs if a Medical Illustration Section is not available elsewhere in the hospital. Equipment should also be available to make slides for visual-aid material to be used in oral research reports.

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## Psychology in the News

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### *A Report on APA's Press Room . . .*

More psychologists and more accredited press people than ever before were in the APA Press Room this fall. So it seems a good time to describe that particular activity and its relationship to "psychology and the news."

As a result of advance planning, and of on-the-spot activity, the annual meeting received some notice not only in the *New York Times*, the *Herald-Tribune*, and on the wire services, but was "covered" by *Time*, *Newsweek*, and other magazines, and was the subject of a visitation from the "About Town" department of the *New Yorker*.

The then President of APA, Lee J. Cronbach, appeared on WCBS' radio program, "This Is New York," and Goodwin Watson was interviewed on "Night-Beat." (This latter was the original Mike Wallace show—it is now managed, more moderately, by John Wingate.) Psychologist Francis Bradshaw, President of Richardson, Bellows, and Henry, appeared on a radio show called "Controversy" and did his best to say what he felt was wrong with Vance Packard's book, *The Hidden Persuaders*.

This year we had reasoned that APA in going to New York was taking a whole range of interesting discussions into the heart of the nation's communications center. It is true we have been there before, but magazine and television interest in psychology and psychiatry seems to grow exponentially. This year we were almost afraid of being inundated and overwhelmed by press interest. But against that possibility, among other things, is the fact that the APA meets over Labor Day. (And it turned out we had a story in *Time* magazine written before the Labor Day holiday, and we had another the week after the Labor Day holiday; so even *Time*, it appears, can nod—if not actually sleep—on a sunny beach once or twice a year.)

In the Statler, instead of just one Press Room, we arranged for two, side by side. The theory was that one room would have the phones and typewriters and the usual hurly-burly, and the other could be used for interviews and would be more of a "quiet room." It was not so quiet that one could have used it for acoustic experiments, but it worked pretty well.

Advance preparation for Press Room operation and supervision of the whole operation was by the convention Public Information Committee chairmanned by Gerhart D. Wiebe. Wiebe had done the same task for the 1954 convention (for his 1954 report, see *Amer. Psychologist*, 1955, 10, 154-156). Others on his committee who made many advance contacts and who did much work in the convention itself were Dave Learner, Henry "Mac" Parsons, and Charles Winick.

Dunlap and Associates sent a very patient Girl Friday, Susan Yarnold. The APA Central Office was represented by Erasmus L. Hoch, Deirdre Dwen, and the undersigned.

The average psychologist could probably predict, with a little thought, the categories and often the specific papers in which newspaper and magazine people would be interested. In a way, the subjects show how the nation of psychology appears to the average man. Psychology thus appears as a country in which the natives are interested in subjects the average man is interested in—subjects like marriage and children, and the right kind of job for the right kind of person.

This year the press was, of course, interested in Goodwin Watson's address on the general subject of sex prejudice against women. One reporter said this interests two classes of readers: (a) women—and (b) men.

The press was interested in other subjects relating to sex. And it was interested in segregation, in "brain washing," in narcotics addiction, and in psychological aspects of space flight. Experimentalists will be pleased to note the reporters were interested in recent work done on the brain, notably the work done by Neal Miller and E. Roy John and their colleagues.

The experimental end of the spectrum of psychologists may also take heart from the interest in B. F. Skinner's latest "push-button teaching machine" and in the widespread and generally accurate reporting of the Bruell-Albee paper on the man who had half his brain removed. All around the edges of all these subjects, reporters and radio people remain interested in mental health. Except for those who have been reporting APA for years, the reporters stuck doggedly to the theory that psychologists



are a kind of people who are interested in mental health or illness, and in counselling, guidance, child development, and so forth.

So, if one judges the public's impressions of psychology as stated by these professional representatives of the public, one would see psychologists as a group of people interested in mental health, in brains damaged and undamaged, in segregation, child psychology, space flight, brain washing, and sex.

To say the least, these are interesting interests! One is tempted to ask who *isn't* interested in these subjects? This sounds like a wierd catalogue. But perhaps the general dimensions are not so far wrong. One can certainly say psychologists are greatly interested in the subject of personnel selection—such as crews for space flight! Or suppose you say psychologists are interested as scientists (and as citizens) in problems relating to segregation, authoritarian or non-authoritarian personalities, and so forth? Are psychologists professionally interested in sex? One has to admit the subject is scattered like strontium through the big blue program.

All together the services of the Press Room were used by approximately 50 persons associated with the mass media or with some specialist press (such as educational newsletters or newspapers for specific ethnic groups).

Emma Harrison of the *New York Times* and Earl Ubell of the *Herald-Tribune* and Dick Winslow of *Newsweek* have been acquainted with APA as a news source for a long time. They will spend hours with an interviewee to be sure they have the story right. One such subject spoke off and on for a couple of hours on an APA panel session. Then he saw Ubell for two hours, Winslow and Harrison together for another two hours. At the end of the day he was so hoarse he could hardly say hello to anyone on the mezzanine.

Special mention should be made of Marjorie Van de Water of Science Service. She is known as "Marjorie" throughout psychology and has been covering psychological news and the APA for many years before there was a Press Room. As we go to press, four of her APA stories have already appeared in *Science Newsletter*, not to mention others in the daily press service of Science Service. She will keep on reporting from her APA meeting interviews for months. Marjorie gets stories which others overlook.

Among the magazine contributors who came by to pick full texts for their files and to interview people by way of keeping their background knowledge current were: Amram Scheinfeld, Albert Q. Maisel, Elizabeth Ogg, and Natalie Davis Spingarn. Scheinfeld, besides having considerable standing in circles of geneticists, is a bona fide member of APA. He writes numerous articles on psychological subjects and contributes a monthly column to *Cosmopolitan* magazine. Maisel, a well-known medical writer, has visited the APA Central Office from time to time and is currently writing a book on the new knowledge of the brain. Spingarn, of Washington, D. C., is a free lance writer in the mental health field. She may be remembered by APAers for her deft portrait of St. Elizabeth's Hospital which recently appeared in *Harper's* magazine. Father Robert A. Graham of *America*, the Jesuit weekly of opinion and scholarship, came by on two separate days, and Carey McWilliams, Managing Editor of *The Nation*, called to ask for a number of items. These two magazines are somewhat alike in their titles, their subject matter, and their typography.

In addition to people who write directly for the press, a number of people dropped in to the Press Room by way of liaison with APA. For example, Harry Milt, the psychologist who directs the manifold publications activities of the National Association of Mental Health, came by to tune in for a while on the old wave length. Representatives of the National Foremen's Institute came by. The Air Force sent Captain Carol Williams, an officer and a lady. She brought some dozen press releases from Lackland, Texas, relating to the work of the Air Force Personnel Training Research Center. George Christian of *Aviation Week* came by to look into the subject of what was happening in the Air Research and Development Command. We also brought *Air Force* magazine up-to-date on human and inhuman factors in USAF.

The *New Yorker* magazine has been interested for many years in psychology and psychiatry. The writer of the most obscure paper or textbook could always have the hope that, no matter how obscure it was, the *New Yorker* might some day run it down and snip out a paragraph to append to the end of a column in the back pages of the magazine. For the *New Yorker*, the more obscure or obfuscated psychology was, the better! And its cartoonists

considered the "head-shrinker" a staple—along with the man on the desert island, the good ladies at their club meeting, and the man in the maternity waiting room.

So we were pleased, but scared, when the *New Yorker* accepted our invitation to send someone from their "About Town" Department to the convention. The person they sent was Lillian Ross. She may be remembered for a long series on the movie director, John Huston, and the making of "The Red Badge of Courage." Ross also followed Ernest Hemingway for days and nights on one of his New York visits. With total recall, apparently, she noted every swallow of liquor that went in, and every expletive which came out, of Papa's lips. Ross was considerably more selective, it appears, in what she wrote of us from a brief trip to the Statler mezzanine. The item (*New Yorker*, September 14) was called "Busy Beavers." It said she had had "the hope of discovering whither Psychologists were drifting this season," but that she had found "right off the bat . . . that psychologists didn't drift." She said:

An exceedingly orderly lot, trim in appearance, brisk of manner, they know precisely what they're up to and why they're up to it, and if they have any commandments, the

first must be "A place for everything and everything in its place."

She quoted Ogden Lindsley of the Harvard Medical School as saying:

We study what we call basics; what is basic ought to be what we know best but is generally, of course, what we know least. Psychologists are to psychiatrists what the biochemist is to the internist, what physics is to electronics. I hope I make myself clear.

It was irritating to us to find that a photographer of a large daily was sent to the meeting with instructions to "take some pictures of men with beards." We weren't able to find any beards for him. But Ross of the *New Yorker* not only found a psychologist with a beard, but allegedly found him ready to say "We have a great variety of beards in our profession."

Like the "About Town" section of the *New Yorker* we will depart with the hint that this is very indicative. One must not ask indicative of *what*. In art and in journalism one sometimes does not say *of*, one just says *very*.

This might be a fine summary not only of the Press Room, but of the whole 65th Annual Meeting: *Very indicative*.

—M. AMRINE

# Psychology in the States

## Inaugural Message

Having assumed the office of Chairman of the Conference of State Psychological Associations, John W. Gustad has submitted the following by way of ushering in the coming year:

In passing on the responsibility for editing this section to the new Chairman-elect of the Conference of State Psychological Associations, Wilbert J. McKeachie, I am grateful for the opportunity to make a few passing comments on certain developments which I feel are particularly important to state associations and their affairs.

During the past three years, I have had the opportunity to observe the growth and development of state associations. I am impressed by the vigor and strength of some, by the imminent promise of many others. It encourages me because I feel that APA must in the future rely increasingly on state associations for the maintenance and strengthening of Psychology as science and profession. Almost all states now have associations; the few which do not will probably organize them in the near future.

During the recent annual convention of the APA, there was much discussion and debate on the role and functions of state associations in APA affairs. Some recommendations of the APA Policy and Planning Board were finally approved by the Council of Representatives. Accordingly, two new boards have been established: a Board of Professional Affairs and a Board of Scientific Affairs.

The Board of Professional Affairs is of special and immediate interest to state associations, since it will be responsible for coordination of the various committees of APA which are concerned with professional problems and developments. Of the nine people appointed to the first board, four are officers of the Conference of State Psychological Associations.

It is anticipated that the board will concern itself very centrally with professional affairs at both the national and the state levels. If the membership approves the by-laws changes proposed by the Policy and Planning Board to the effect that the Conference be eliminated and that the states be represented directly on Council, the Board of Professional Affairs will have the responsibility for establishing some appropriate mechanism for effecting coordination and communication among the states.

Speaking for myself, I believe that the suggested by-laws changes are good. I believe that, with direct representation on Council and with the Board of Professional Affairs being centrally concerned with state problems, APA will be more responsive to the needs and problems of the state associations. It is impossible at this time to know exactly how the new board will be organized, how it will go about fulfilling its charges. There will undoubtedly be a lot of cutting and fitting. State associations as groups, and individuals as interested APA members, can be of invaluable assistance if they will keep the board informed of their prob-

lems and ideas, their suggestions and criticisms. This is one of the things which has impressed me most as I have dealt with state affairs: the need for states to keep APA informed so that policies and practices may reflect the needs of both individuals and state associations.

There will be established some organization, such as a group of presidents of state associations, to provide a channel of communication to the board. The board is required to report on its activities to this group, however it is finally constituted. The strength and usefulness of the Board of Professional Affairs will in great part be determined by the amount of information and help it receives from APA members and state associations.

I do not believe that it is correct to interpret the proposed changes in APA structure as indicating any decreased concern for state affairs. It is my impression that the reverse is true. No reorganization, however carefully done, can do more than provide the means for accomplishing certain desirable ends. How well those means serve the purpose, depends in the last analysis upon the use members make of them.

\* \* \*

**New CSPA Officers.** Officers of the Conference of State Psychological Associations for the year 1957-58 are as follows:

Chairman: John W. Gustad  
Chairman-elect: Wilbert J. McKeachie  
Secretary-Treasurer: George S. Speer

In order that everyone may profit from everyone else's experiences during the coming year, the newly elected officers strongly urge that this column be utilized fully for the dissemination of information. Material for inclusion in "Psychology in the States" may be submitted to either of the following:

Wilbert J. McKeachie  
Department of Psychology  
University of Michigan  
Ann Arbor, Michigan

Erasmus L. Hoch  
American Psychological Assn.  
1333 Sixteenth Street, N.W.  
Washington 6, D. C.

**New State Associations.** At the recent APA convention, the Council of Representatives approved for affiliation with APA three newly founded state associations: Mississippi Psychological Association, New Mexico Psychological Association, and South Dakota Psychological Association. In addition, the Council of Representatives approved trans-



fer of affiliation with APA from the Psychology Section, Virginia Academy of Science to the Virginia Psychological Association organized in May 1956.

**AMA and Legislation.** By way of clarifying the stand of the American Medical Association on legislation applicable to psychology and psychologists, APA Central Office recently initiated an exchange of correspondence. We had previously received an AMA report which read:

In view of the fact that psychologists are continuing to obtain the passage of licensure or certification laws in some of the states in spite of state medical association opposition, the Board recommends opposition by the American Medical Association to the licensure of psychologists.

On the basis of the above, we had inquired of AMA whether the latter could be interpreted as meaning that, while AMA was opposed to licensure, it was "not opposed" to certification laws for psychologists. The following excerpt concludes a reply of July 3, 1957 from C. Joseph Stetler of AMA's Law Department:

Thus, the A.M.A. opposes the licensure of psychologists, but has not taken any position with respect to their certification. By stating as you propose that the A.M.A. is "not opposed" to certification laws for psychologists, you are attributing a position to the A.M.A. which in fact it has not adopted.

**Legislative Progress.** In the course of the past year, certification laws have been enacted in four additional states: California, Florida, Maryland, and New Hampshire. In certain instances the gains have been won only after considerable struggle; in others, the legislative course has been smoother. All told, 14 states now have legislation pertaining to psychologists—4 states having licensing laws; 10 states, certification laws. In addition, nonstatutory regulation exists in 5 states.

\* \* \*

**State Associations in Action.** By way of building a repertoire of suggested projects, this department will describe in detail such state association programs as may inspire emulation or elaboration in other quarters. The following account is the first in such a series.

At its annual meeting at Bowdoin College on May 4, 1957, the Maine Psychological Association voted to initiate a vigorous program aimed at easing the shortage of psychologists and at expanding and improving psychological services in the state.

This action was taken upon recommendation of the MPA's Committee on Mental Health. The latter, in a state-wide questionnaire survey of schools, colleges, state agencies and institutions, and municipal courts, had found that there was an immediate need for twice the number of psychologists now employed in the state.

The program adopted by the Maine Psychological Association calls for initiating the following actions: (a) proposing reorganization of mental health services within the state; (b) encouraging creation of state scholarships or subsidies to aid students in obtaining graduate training in psychology in return for a limited number of years of postgraduate service within the state; (c) providing an analysis of salary schedules and job specifications for psychologists as a basis for recommendations aimed at making salaries of Maine psychologists competitive with those in other states; (d) studying the feasibility of listing part-time consultants and examiners in the MPA's directory, along with a suggested schedule of fees for such professional services; (e) working toward the improvement of state teacher-training facilities to provide teachers with adequate training in psychology and to aid them in furnishing improved psychological services for children; (f) coordinating the state association's mental health program with the programs of other professional and private organizations within the state devoted to the same ends; (g) applying for public research grants to support the surveys and studies needed to implement the proposed program for expansion of the state's psychological services.

To insure continued pursuit of the program adopted, the MPA voted to change the status of its Committee on Mental Health from that of an ad hoc committee to that of a standing committee.

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**Ethics Committee.** Having been informed of several instances in which nonpsychologists seemed to be usurping professional prerogatives, the Indiana Psychological Association has appointed a Committee on Ethical Practices. The immediate concern of the committee is a compilation of cases in which deviations from accepted ethical practices have occurred or continue to occur.

**Civil Service Examinations.** In response to a recommendation from its Clinical Division, the Pennsylvania Psychological Association has ex-

pressed to the state Civil Service Commission its views concerning unassembled examinations for psychologists. The PPA suggests that three factors be taken into account: academic credentials, ratings by training supervisors, and ratings by professional supervisors.

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**New State Association Officers.** The following rosters of officers have been announced by the associations indicated:

**Hawaii Psychological Association**

President: George F. Harding  
President-elect: Fred E. LaFon  
Secretary-Treasurer: Ruth W. Iams

**Maine Psychological Association**

President: L. Ross Cummins  
President-elect: Edward N. Brush  
Secretary-Treasurer: Joseph J. Antonitis

**Mississippi Psychological Association**

President: Herdis L. Deabler  
President-elect: Ralph W. Erickson  
Secretary-Treasurer: James M. Lanmon

**Nebraska Psychological Association**

President: Robert J. Ellingson  
President-elect: J. Lewis Yager  
Secretary-Treasurer: Frank J. Dudek

**New Mexico Psychological Association**

President: James J. Calvert  
President-elect: Ralph D. Norman  
Vice-President: Jerome H. Gibson  
Secretary: William F. Lowe  
Treasurer: Robert F. Utter

**New York State Psychological Association**

President: Florence Halpern  
President-elect: Raymond A. Katzell  
Secretary: Leonard S. Kogan  
Treasurer: William J. E. Crissy  
Executive Secretary: J. Lawrence Broderick

**Pennsylvania Psychological Association**

President: Paul L. Whitely  
President-elect: Joseph S. Herrington  
Secretary: Mildred L. Sylvester  
Treasurer: Howard E. Mitchell

**South Dakota Psychological Association**

President: Donald W. Sydow  
President-elect: Gerald M. Fort  
Secretary-Treasurer: Evelyn Rimel

**Virginia Psychological Association**

President: William J. Morgan  
Vice-President: Gilbert J. Rich  
Secretary: Cora L. Goldsborough  
Treasurer: Jacob Silverberg

**Psychology Section, Virginia Academy of Science**

Chairman: Noble McEwen  
Secretary-Treasurer: Penelope Lewis

**Boards of Examiners in Psychology.** The present composition of the following boards has been announced:

**New Hampshire Board of Examiners in Psychology**

Chairman: Herbert A. Carroll  
Secretary: Walter F. St. Clair  
Member: Albert A. Hastorf

**Tennessee Board of Examiners in Psychology**

Chairman: George E. Copple  
Vice-Chairman: J. M. Porter, Jr.  
Members: Alfred D. Mueller  
Francis Deter  
E. Ohmer Milton

\* \* \*

**State Convention Calendar**

**California State Psychological Association:** April 24-26, 1958; Monterey, California.

*For information, write to:*

David L. Cole  
1535 Hazelwood Avenue  
Los Angeles 11, California

**Illinois Psychological Association:** October 11-12, 1957; Chicago, Illinois.

*For information, write to:*

George S. Speer  
3329 South Federal Street  
Chicago 16, Illinois

**Ohio Psychological Association:** October 25-26, 1957; Cincinnati, Ohio.

*For information, write to:*

Lucien A. Cohen  
Department of Psychology  
University of Cincinnati  
Cincinnati, Ohio

—W. J. McKEACHIE  
E. L. HOCH

## Psychological Notes and News

**Application Deadlines.** The deadline for submitting an application for *Fellow* status is January 1, 1958. By that date one copy of the Uniform Fellow Blank (UFB) for each division through which application is being made must be filed with the APA Central Office. The blanks are available only from division secretaries—the number required by the divisions varies, and some divisions need information in addition to that called for on the UFB. The deadline for submitting an application for *Associate* or *Member* status is August 1, 1958. Blanks and instructions are available from the APA Central Office.

The amendments to the APA membership By-Laws, presented in the Report of the APA Policy and Planning Board in the April 1957 *American Psychologist*, were accepted by the membership in mail ballot. Because these amendments change the requirements for all categories of membership, it is important that applicants familiarize themselves with what is needed before applying. Briefly, the new requirements are as follows: for *Fellow*, doctoral degree based in part upon a psychological dissertation, prior membership as a Member for at least one year, five years of acceptable postdoctoral experience, evidence of unusual and outstanding contribution or performance in the field of psychology, and nomination by one of the divisions of which he is a Member; for *Member*, doctoral degree based in part upon a psychological dissertation; for *Associate*, completion of two years of graduate study in psychology, or the master's degree in psychology plus a year of acceptable experience in psychological work, plus, in either case, full-time employment or study in psychology at the time of election. There are provisions for waiving some of the technical requirements at all levels.

The thirteenth Congress of the International Association of Applied Psychology will be held in Rome, Italy, April 9–14, 1958. IAAP invites membership in the association and participation in the congress. Forms and information provided by IAAP are available from the APA Central Office.

**APA Congress Flight 1957.** Arranging the charter flight to the fifteenth International Congress of Psychology in Brussels, Belgium—APA's first

such venture—was a unique experience. Nobody believed that anybody could get 98 psychologists to do anything jointly, much less fly to Europe on the same day. It may be supposed, however, that the \$310 round trip ticket offered by the Slick Airways was a happy persuader, a saving of 45% on the usual \$558 tourist fare to Brussels. The available seats sold out within 10 days of the announcement, and only three cancellations materialized for the considerable waiting list. Reservations ranged from Bar Harbor, Maine to Tacoma, Washington.

The flight was authorized, despite objections from a commercial carrier, when the Civil Aeronautics Board judged APA charter-worthy. This was largely because a preliminary hearing before CAB was arranged prior to the actual mailing of the flight announcements. Such procedure is highly recommended for any future charters.

Departure from Idlewild was somewhat later than anticipated; once aloft, however, the flight was very smooth. The DC-6B aircraft was operated by a double crew plus two stewardesses and a nurse. Warm meals were served, and kosher food was provided for a passenger who had requested it. Sociability was fostered by the somewhat cramped seating arrangements and by the brief stops in Newfoundland and Ireland. The tax- and duty-free Shannon Airport made its contribution, and a happy bunch arrived in Brussels at 2:00 A.M.

As in years past the international congress provided an opportunity to meet colleagues from many lands. There was time for talk with little of the usual hectic APA pressure; hardly anybody was shopping for a job. Of the 1200 active and associate congress members: 30% came from the United States, 17% from Belgium, 13% from Great Britain, 10% from France, and 5% from Germany, with the remainder from around the globe including Russia and the satellite countries. The APA flight accounted for a quarter of the Americans present, with another 25% attending on military orders.

The return plane was scheduled to leave Paris at noon on August 19. Slick atoned for its earlier delay by rescheduling departure from noon to 7:00 P.M., thus giving us an extra day in Paris, and postponing New York arrival to around noon instead of 2:00 A.M. There were few complaints. Strong headwinds over the Atlantic detoured us via Ice-



land and Labrador, but without delay in estimated New York arrival time.—HENRY P. DAVID

The APA Education and Training Board has supported the publication of the proceedings of the Conference on Psychology in Medical Education held at Columbia University in March 1956. The proceedings are published in the Fall 1957 issue (Vol. IV, No. 3) of the journal, *Neuropsychiatry*.

The American Board of Examiners in Professional Psychology, Inc. announces an increase in fees for the processing of candidacies. The application fee will be fifty dollars (\$50.00). The fee for written examination will be thirty dollars (\$30.00). The fee for oral examination will be fifty dollars (\$50.00). There is no additional fee for the award of the diploma. The fee for re-examination on the written examination will be thirty dollars (\$30.00), and the fee for re-examination on the oral examination will be fifty dollars (\$50.00). This increase in the fee schedule became necessary because of rising costs in the processing of candidacies and in the conduct of examinations. The new schedule of fees will become effective May 1, 1958.

ABEPP is pleased to announce the award of its diploma to additional members of the profession. Awards have been made to the following 48 candidates who have satisfactorily completed both written and oral examinations in addition to all other requirements of training, experience, and endorsements:

#### CLINICAL PSYCHOLOGY

Dorothy V. Anderson	Joseph Luft
Harvey R. Austrin	Laurence S. McGaughran
Robert P. Barrell	John G. Martire
Loretta K. Cass	Joseph D. Matarazzo
David Cohen	Samuel J. Meer
Donald Ehrman	Carmen Michael
Nathaniel H. Eisen	Stanley Moldawsky
Edmond F. Erwin	David Pearl
Morris Goddman	M. Henry Pitts
Leonard D. Goodstein	Benjamin Pope
Zoltan Gross	Roderick W. Pugh
Ralph H. Gundlach	Marian Dolores Robinson
Norman I. Harway	Alexander C. Rosen
Ernest A. Hirsch	Bernard Saper
Philip S. Holzman	Jacob Silverberg
Leonard Horwitz	Felman B. Sorsby
Earl J. Janda	Emanuel D. Starer
Walter G. Klopfer	Donald R. Stieper
Albert Kostlan	Robert F. Suczek
Julian J. Lasky	Charles Wenar
Lester Luborsky	Harold Wilensky

#### COUNSELING PSYCHOLOGY

Lawrence M. Brammer      John W. Love

#### INDUSTRIAL PSYCHOLOGY

Milton L. Rock      Naomi Stewart  
Jay T. Rusmore      J. Watson Wilson

According to continuing policy, all previous awards have been announced in the *American Psychologist*. To date, ABEPP has made a total of 1351 awards of its diploma. These awards are distributed as follows:

Diploma awarded to senior members of APA with waiver of written and oral examinations .....	1068
Diploma awarded to members of APA by satisfactory performance on written and oral examinations .....	263
Diploma awarded to senior members of the Canadian Psychological Association with waiver of written and oral examinations .....	18
Diploma awarded to members of CPA by satisfactory performance on written and oral examinations .....	2
	<hr/> 1,351

The American Board for Psychological Services announces that March 1, 1958, is the deadline for information to be included in the 1958 issue of the *ABPS Directory*. Individuals, institutions, and agencies interested in being included in this directory should apply as soon as possible to: American Board for Psychological Services; 9827 Clayton Road; St. Louis 17, Missouri.

William Root Birge, of Rensselaer Polytechnic Institute, died August 4, 1957.

Francis E. Brodney, of the U. S. Navy Personnel Research Field Activity in Washington, D. C., died July 24, 1957.

Ralph P. Cochran, of West Lafayette, Indiana, died May 13, 1957.

John A. Cooper, of El Paso, Texas, died July 17, 1957.

Henry H. Goddard, of Santa Barbara, California, died July 18, 1957.

Samuel B. Heckman, of Wayne, Maine, died July 28, 1957.

William Leroy Jenkins, of Bethlehem, Pennsylvania, died July 25, 1957.

Joseph J. Johnston, of Los Angeles, California, died in 1957.

Ernest Meyers, of the University of Kentucky, died July 20, 1957.

Raymond B. Teixeira, of Towson, Maryland, died June 27, 1957.

**Ruth S. Tolman**, of Pasadena, California, died September 17, 1957.

**Derrick S. Trouton**, of London, England, died August 5, 1957.

**Winfield M. Wickham**, Director of the Alameda County Probation Department Guidance Clinic, California, died September 14, 1957.

**Katherine M. T. Wolf**, Associate Professor of Psychology in the Child Study Center at Yale, died September 14, 1957.

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EDITOR'S NOTE. *New appointments of only members of APA will be announced in this section of "Psychological Notes and News." Space limitations have made it necessary to discontinue announcements: of promotions within an agency when no essential change in function or location is implied, of lists of personnel when no appointment additional to or different from what already appears in the APA Directory (now an annual publication) is involved, and of the appointments of personnel who are not members of APA. Under these conditions, this section becomes a kind of interim directory in which the entries describe the new appointments, current activities, or relocations of members of APA.*

**Robert H. Alexander**, formerly head of the Department of Psychology at McMurray College, is now Research Director of the Springfield Mental Health Clinic and also an associate of neuropsychiatrists in Springfield, Illinois.

**John A. Barlow**, formerly Assistant Professor of Psychology at Dennison University, has been named head of the Earlham College Psychology Department and will re-establish an experimental psychology laboratory on the Richmond, Indiana campus.

**John R. Martin Associates** of New York City announce the appointment of **Loran F. Baxter** to their staff.

**Richard M. Beindorff** has been appointed Clinical Psychologist at the Macomb County Youth Home, Mount Clemens, Michigan.

**Arnold Bernstein**, Department of Psychology, Queens College, is attached to the staff of the Creedmoor Institute of Psychobiological Studies as a Research Associate.

**Morton Bitterman**, formerly at the Institute of Advanced Study in Princeton, has been appointed Associate Professor of Psychology on the faculty of Bryn Mawr College.

**William H. Blanchard**, formerly Director of Research for the Southern Reception Center of the California Youth Authority in Norwalk, California, has accepted a position as Associate Social Scientist with the RAND Corporation, Systems Development Division in Santa Monica, California.

**Charles W. Bray** has been appointed Technical Director of the Air Force Personnel Training Research Center, Lackland Air Force Base, Texas.

**John H. Brochard**, formerly Assistant Professor at the University of Illinois, has joined the faculty of the School of Education, University of Buffalo as Assistant Professor in the area of Guidance and Student Personnel.

**Donald H. Bullock** has recently been appointed an Associate Editor of *Psychological Reports*.

**Paul L. Cambreleng** has been appointed Executive Associate in the Personnel Relations Department of Newark College of Engineering.

**Barbara Stahl Cannell** has been named an Assistant Professor of Psychology at Barnard College, Columbia University.

**E. Kenneth Carpenter** has accepted the position of Associate Professor of Psychology at the University of Rhode Island where a major in psychology has been recently approved by the university. He will also assist **Marvin Rife**, Coordinator of Advisement and Guidance in the University Counseling Center.

**W. Frank Caston** has accepted the position of Director of the Psychology Department of the Caswell Training School, Kinston, North Carolina.

**John A. Chase** has become Personnel Director of the accounting firm of Scovell, Wellington & Company.

**Conrad Chyatte** has joined Jordan, Sieber & Corbett, Inc. as Director of Research. He will also continue in his capacity as Assistant Professor of Psychology at De Paul University.

The Psychology Department of the Connecticut State Hospital announces the appointments of **Edward L. Friedman**, **David G. Lowy**, **John E. Teahan**, and **Duncan E. Walton** as Senior Clinical Psychologists. Departmental consultants include: **Irvin L. Child**, **Ethelyn H. Klatskin**, **George F. Mahl**, **Seymour B. Sarason**, **Roy Schafer**, and **David Shapiro**.

**Don J. Cosgrove** has joined the Procter & Gamble Company in Cincinnati as a Staff Psychologist in the Personnel Administration Department.

Courtney and Company of Philadelphia announces the addition of **Lois-ellin Datta**, formerly of Bryn Mawr College, to its staff as Research Assistant and of **Omer Lucier**, formerly of Richmond Professional Institute and the University of Texas, as Research Associate.

**Junius A. Davis**, Assistant Professor of Psychology at Emory University, assumed duties as Director of Testing and Guidance of the University System of Georgia on September 1 when **Joseph E. Moore** returned to his duties as Chairman of the Department of Psychology at Georgia Institute of Technology.

**Sidney I. Dean**, formerly Chief Psychologist at the Darlington-Florence Mental Health Clinic, has accepted the position of Chief Clinical Psychologist at the Mills Educational and Testing Center in Fort Lauderdale, Florida.

**Mitchell Dreese**, Dean of The College of General Studies and Professor of Educational Psychology at George Washington University, will be on leave from the university until February 1, 1958.

**Lawrence Eldridge** has resigned from John R. Martin Associates, Inc. to enter private practice in New York City.

**John M. Atthowe, Jr.**, **Eugene Dutton**, and **Walter Isaac** have accepted appointments in the Department of Psychology of Emory University.

**Milton H. Erickson** has been elected President, and **William T. Heron**, Treasurer, of the recently organized American Society of Clinical Hypnosis. Erickson has also been appointed Editor of the journal, *American Journal of Clinical Hypnosis*, to be published by the society.

**Edwin A. Fleishman** and **Starke R. Hathaway** are invited contributors from the United States to the first 1958 issue of the *Revue de Psychologie Appliquée* which will honor Alfred Binet. Other contributors are **Cyril Burt**, **de Gobineau**, **Oleron**, **Schrieder**.

The Palm Beach County Crippled Children's Society, Inc. announces the appointment of **Arthur J. Gallese, Jr.**, formerly USPHS clinical psychology trainee at the University of Minnesota Hospital, as Director of Psychological Services in its newly established Department of Psychology.

Members of the APA recently appointed to the psychological staff of George Fry & Associates are: **Charles A. Dailey** and **Keith R. Jewell** in the Chicago office, **Neal J. Rorke** and **Martin J. Byrne** in the New York office.

**Fred J. Goldstein** has resigned from the Pinel Foundation, Seattle, to accept the position of Chief Psychologist at the Los Angeles Psychiatric Service.

**Sol Gordon** has been appointed Chief Psychologist at the Philadelphia Child Guidance Clinic.

**Harry A. Grace**, formerly Dean of Men at Grinnell College, has been appointed Associate Dean of Students (Counseling and Testing) at California State Polytechnic College, San Luis Obispo, California.

A new member of the staff of the Personnel Measurement Research Division of the US Naval Personnel Research Field Activity, Washington, D. C., is **Byron L. Groesbeck**, formerly at the University of Colorado.

**Nathan B. Gross** has been named acting head of the Department of Psychology at Lehigh University for the 1957-58 academic year. He will fill the vacancy created by the death of **William L. Jenkins**.

**Andrew W. Halpin** has been appointed Associate Professor of Education at the University of Chicago; he will also serve as Research Consultant for the Midwest Administration Center.

Recent appointments as Research Associates on the professional staff of Walter V. Clarke Associates are **Kermit R. Hasler** and **Peter F. Merenda**.



**Sara S. Hawk** has recently been lecturing on the moto-kinaesthetic method of speech training.

The Navy Air Crew Equipment Laboratory in Philadelphia has recently established an Experimental Engineering Psychology Division with **Keith J. Hayes** responsible for developing new scientific programs and **Sherwin J. Klein** serving as Acting Superintendent.

**William D. Hitt**, formerly an industrial psychologist for the Kimberly-Clark Corporation, has joined the Systems Engineering Division of Battelle Memorial Institute, Columbus, Ohio.

**Allen Hodges**, former Clinical Psychologist at the Southern Minnesota Mental Health Center, has accepted the position of Psychological Consultant, Community Mental Health Services, State of Minnesota. **Sam Selzer** is now Clinical Psychologist and Administrative Director of SMMHC, Albert Lea, Minnesota.

**E. P. Hollander** will be on leave from the Carnegie Institute of Technology for the 1957-58 academic year to fulfill an appointment as Fulbright Lecturer in Psychology at the University of Istanbul in Turkey.

**Lloyd G. Humphreys**, Technical Director of the Air Force Personnel and Training Research Center's Personnel Laboratory, has been given an outstanding performance award for his exceptional contributions to AFPTRC's research program, his competence, and his devotion to duty.

**Ludwig Huttner** has resigned as Director of Personnel Research and Manpower Development at Pillsbury Mills, Inc. to become Manager of the newly created branch office in Minneapolis, Minnesota of Stevens, Thurow and Associates, Inc.

**Rodman Kabrick**, formerly of the Child Guidance Center, has been appointed to the faculty of the Pediatrics Department of the University of Missouri Medical School.

**Robert C. Kammerer** has become Vice-President-Treasurer, and **Jesse B. Rhinehart**, Vice-President-Secretary, of Southern Research Associates, Inc., Jackson, Mississippi.

**Irving Kauffman**, formerly in The Institute for Psychosomatic and Psychiatric Research at Michael

Reese Hospital, has accepted the position of Chief Psychologist at E. H. Parsons and Associates in St. Louis, Missouri. He will also be associated with Barnes Hospital and Washington University Medical School.

**James J. Keenan, Jr.** is now Senior Research Associate at Dunlap and Associates, Inc., Stamford, Connecticut, having formerly been associated with the Institute for Research in Human Relations and the Applied Psychological Services in Pennsylvania.

**Patricia L. Jackson** has been appointed Director of the Research Division of the Klein Institute for Aptitude Testing, Inc. of New York. Recently appointed staff psychologists are: **Jack Bernard**, **F. M. Gilhooly**, and **Salvatore Pizzurro**.

**Karl D. Kryter** and **J. C. R. Licklider** have joined the consulting firm of Bolt Beranek and Newman Inc. The latter has been named to direct the scientific activities of the Engineering Psychology department of the firm.

**Rudolf Lassner**, formerly at the Delaware State Hospital and Mental Hygiene Clinic, is now Chief Clinical Psychologist at the Mental Hygiene Clinic of Raleigh and Wake County in North Carolina.

Members of APA who have joined the behavior science program at the Carnegie Institute of Technology are **Harold J. Leavitt**, Professor and **John N. McCall**, Instructor.

**Herschel W. Leibowitz** is now on a year's leave of absence carrying out research at the Max Planck Institut für Verhaltensphysiologie at Oberbayern, Germany; he will return to his duties at the University of Wisconsin for the second semester of 1957-58.

**Louis Lepine** has been appointed Instructor in Psychology, on a part-time basis, at Villanova University.

**Eugene A. Levitt**, formerly of the Westchester Childrens Association, has joined the staff of the Child Guidance Clinic of the Valley Children's Hospital, Fresno, California.

**Seymour Levy**, formerly at Queens College, has now joined Pillsbury Mills, Minneapolis, as the Manager, Personnel Research and Manpower Development.

**Solomon S. Lieberman** has been appointed Clinical Instructor in the Department of Psychiatry (Psychology) of the New York State College of Medicine at New York City.

**Stanley B. Lindley**, formerly Director of Professional Services at the Knoxville VA Hospital, has been appointed Manager of the VA Hospital at St. Cloud, Minnesota.

**Luther Craig Long**, Director of the Psychology Department at Selinsgrove State School, has also been appointed to the position of part-time Psychologist with the Geisinger Memorial Hospital and the Foss Clinic in Danville, Pennsylvania.

**Donald J. Lewis**, formerly of Northwestern University, has been appointed Associate Professor of Psychology at Louisiana State University. **Neil D. Kent**, from Indiana University, and **Barbara K. Levy**, from the University of California, have been appointed Instructors in Psychology.

**William A. Lybrand**, formerly of Psychological Research Associates, Inc., has been appointed Director, Training Department, at Carmody Corporation, Buffalo, New York.

The Department of Psychology at Marshall College announces the appointment of **Mary Lyon Sutton** as Assistant Professor and **Alex Darbes** as Associate Professor. Leaving the department are **Florence H. Van Bibber**, retired, and **Madeleine H. Feil** who has become a partner in Personnel Management Services, Columbus, Ohio.

**Jack Matthews**, Chairman of the University of Pittsburgh Speech Department, was recently elected President-elect of the American Association for Cleft Palate Rehabilitation.

**Robert Melniker**, formerly of the Diagnostic and Evaluation Clinic at Queens General Hospital, has joined the Psychological Services Division of the Long Beach City School District, Long Beach, New York.

**Howard E. Mitchell**, formerly Assistant Chief Clinical Psychologist at the Philadelphia VA Mental Health Clinic, has become Chief Psychologist, Child Guidance Clinic, Lankenau Hospital, Philadelphia, and Research Director, Philadelphia Marriage Council.

**Stanley Moldawsky** has resigned his position as Staff Psychologist at the East Orange VA Hospital to devote full time to private practice in Newark, New Jersey.

**Jack H. Monderer** has been appointed to the newly created position of Director of Pupil Personnel Services in the Ridgefield, Connecticut school system. He was formerly at the Vocational Counseling Service, Inc. in New Haven.

**Wendell R. Wilkin** has replaced **Ernest K. Montague** as Chief of the Clinical Psychology Branch, Office of the Chief Psychiatry and Neurology Consultant, Office of the Army Surgeon General in Washington, D. C.

**Victor E. Montgomery**, formerly of the Maintenance Laboratory, Air Force Personnel and Training Research Center, has accepted a position with Boeing Airplane Company, Seattle, Washington.

**George K. Morlan** has been appointed Coordinator of Professional Service, Lederle Medical Research Department, Research Division of American Cyanamid.

Pace College, New York City, announces the appointment of **C. Eugene Morris** as Dean of Students.

The following have recently been added to the staff of the National Institute of Mental Health, Bethesda, Maryland. In the Research Grants & Fellowships Branch: **Irving Simos**, Executive Secretary, Mental Health Small Grants Review Committee, formerly Clinical Psychologist at the Perry Point VA Hospital; and **Wilson L. Taylor**, Research Psychologist, formerly Research Assistant Professor at the University of Illinois. In the Psychopharmacology Service Center: **Dean J. Clyde**, Research Psychologist, formerly a consulting psychologist in the Virgin Islands.

The following were elected officers of the National Psychological Consultants to Management, Inc.: **J. Watson Wilson**, President; **William E. Brown**, Vice-President; **W. J. Humber**, Vice-President; **Robert F. Snowden**, Secretary; **Charles Roth**, Treasurer.

**Morris E. Eson**, Chairman of the Psychology Department, New York State College for Teachers

at Albany, has received a Fulbright award to spend 1957-58 at the Hebrew University, Jerusalem. During his absence, **Frank M. Calabria** will assume some of his teaching duties. **Muriel Morgan** has joined the staff of the Education Department and has part-time duties in the Psychology Department.

**Clyde E. Noble**, formerly of Louisiana State University, has accepted a position as Associate Professor of Psychology at Montana State University. He will also serve as scientific consultant to the Fort Bliss, Texas unit of the Human Resources Research Office.

The following have joined the staff of the Psychology Department at North Carolina State College: **Slater E. Newman** and **John O. Cook** as Assistant Professors and **Clifton W. Gray** as Instructor.

**Curtis W. Page**, formerly Chief Clinical Psychologist at the Osawatomie State Hospital has accepted an appointment as Director of Research and Training at the Traverse City State Hospital, Traverse City, Michigan.

**Howard E. Page**, formerly Director, Psychological Sciences Division, Office of Naval Research, Washington, D. C., has become Science Director, Office of Naval Research Branch Office in London, England. **Denzel Smith** is the new Director of the division in Washington.

**James W. Parker** has joined the staff of the Personnel Research and Development Corporation of Cleveland, Ohio, as Research Associate.

**Robert B. Payne**, formerly head of the Department of Psychology, School of Aviation Medicine, has joined the staff of the Arctic Aeromedical Laboratory, Ladd Air Force Base, Alaska.

**Robert H. Davage**, **Edmund V. Mech**, and **William F. Prokasy, Jr.** have been appointed Assistant Professors in the Department of Psychology at Pennsylvania State University. **C. R. Carpenter**, head of the department, has been appointed Director of the Division of Academic Research and Services. **Donald Ford**, **Jefferson Ashby**, and **Martin Zeigler** have been named Assistant Directors of the Division of Counseling. **Sidney Siegel** has been granted a leave of absence to attend the

Center for Advanced Studies in the Behavioral Sciences.

**Warren R. Graham**, **Harold Martinek**, and **John J. Mellinger** have recently become Research Psychologists on the staff of the Personnel Research Branch, The Adjutant General's Office, Department of the Army.

The following appointments have been made in the Psychology Branch of the Quartermaster Research and Engineering Center Laboratories, Natick, Massachusetts: **Edwin R. Dusek** is now Chief of the Psychology Branch; **Henry F. Gaydos** and **John L. Kobrick** are now Chiefs of the Psychophysiology Section and the Human Engineering Section, respectively.

**Robert Reiff** has accepted appointment as Chief Psychologist with the Jewish Board of Guardians in New York City. This past summer he was Visiting Associate Professor at Vanderbilt University in Nashville. He has resigned as Chief Psychologist at the Chattanooga Guidance Clinic.

**Margaret M. Riggs**, formerly at the University of Connecticut, is the new training supervisor for psychology in the Western Massachusetts Mental Health Training Program.

**Herbert Sanderson** has resigned as Director of the Jewish Vocational Service in Florida to accept an appointment as Associate Professor in Education at San Francisco State College.

**Robert Schaeffer** (Trainee) and **Joseph Warner** have been added to the staff of State Hospital No. 1, Fulton, Missouri.

**C. Winfield Scott** has become Director of Advanced Study and Coordinator of the Department of Guidance and Educational Psychology in the School of Education, Rutgers University. He was formerly and simultaneously Director of Vocational Counseling Service, Incorporated; Lecturer in Educational Guidance in the Graduate Department of Education, Yale University; and Dean of Students, New Haven State Teachers College.

**Jonathan Wegener**, formerly of the Institute of Living, has been appointed Assistant Professor in the Department of Psychology at Yale, replacing **Seth K. Sharpless** who resigned to accept a re-



search appointment in the medical school at Yeshiva.

Rohrer, Hibler & Replcgle announces the appointment of **Thomas B. Shrewsbury** to the staff of the San Francisco office and **Carl S. Wright** to the Dallas office of the firm.

**Stanley Spiegel**, formerly Assistant in Research in the J. Hillis Miller Health Center at the University of Florida, has accepted an appointment as Clinical Psychologist at the Portsmouth Area Counseling and Guidance Clinic, Portsmouth, Virginia.

**S. D. S. Spragg** has been appointed Acting Dean of the new Council of Graduate Studies at the University of Rochester, New York.

**Harold Sprinzen** has resigned his position as Chief Clinical Psychologist at the Youngstown Child Guidance Center to enter full-time private practice.

**James Condell**, **Robert L. Swift**, **Seymour Wolf**, and **Rita Wurzel** were recently added to the staff of the Psychology Department of the State Hospital, Jamestown, North Dakota.

**Godfrey D. Stevens** has been appointed Educational Director of United Cerebral Palsy Associations.

**Maude A. Stewart** has become an Associate Professor in the Department of Psychology and a member of the staff of the Dean of Women at Ohio State University.

**Hans H. Strupp** has been appointed Director of Psychological Services at the North Carolina Memorial Hospital and Associate Professor of Psychology in the Departments of Psychiatry and Psychology at the University of North Carolina. He formerly directed a research project in psychotherapy at George Washington University.

**Joseph T. Sutton** has joined the staff of the Department of Psychology at Alabama Polytechnic Institute.

New members of the Department of Psychology of Texas Technological College are: **Robert G. Smith, Jr.**, formerly at the Air Force Personnel and Training Research Center, as Associate Professor;

and **Carolyn L. Attneave**, formerly at Texas Women's University, Assistant Professor.

**Garth J. Thomas** has accepted an appointment as Professor in the Departments of Electrical Engineering and Physiology at the University of Illinois, Urbana. He was formerly at the Illinois Neuropsychiatric Institute and the University of Chicago.

**Mark Tucker**, formerly Director of Education at the Illinois Children's Hospital-School and teacher-psychologist at the National College of Education, has assumed the duties of Coordinator of Education for Exceptional Children at the University of Kentucky.

New members appointed to the Department of Psychology at the University of California are: **Jack Block** and **Richard S. Lazarus**, Associate Professors, and **Joseph C. Speisman**, Assistant Professor. Among the visiting appointments at Berkeley during the present academic year are: **Floyd H. Allport**, **Fred Attneave**, **Arthur A. Lumsdaine**, and **Leona E. Tyler**.

**Donald G. Marquis**, Chairman of the Department of Psychology at the University of Michigan, is currently on leave to carry out a special staff assignment for the Social Science Research Council. **E. Lowell Kelly** is Acting Chairman of the Department during his absence. **Arthur W. Melton**, formerly Technical Director of the Air Force Personnel and Training Research Center, has been appointed Professor; as a member of the Research Planning Staff of the Engineering Research Institute, he will be responsible for the psychological aspects of all ongoing research programs. **James Olds**, formerly in the Department of Anatomy at the University of California at Los Angeles, has been appointed Associate Professor.

**Harold P. Van Cott** has been appointed Program Director of the Systems and Human Engineering Program at the American Institute for Research, Pittsburgh, Pennsylvania.

**John D. Werntz** has changed his name to **John van Laer** and has left the University of Pennsylvania to accept a Postdoctoral Fellowship in Statistics at the University of Chicago.

Jules Van Praag, formerly Senior Psychologist at the Montana State Hospital, has assumed duties as Senior Psychologist and Director of Training in the Psychology Department at the Utah State Hospital at Provo.

The following personnel changes have occurred in *Psychological Services*, Department of Medicine and Surgery, Veterans Administration:

Ruth Aisenberg, a graduate of the Counseling Psychology Training Program, has accepted a staff position at the VA Hospital, Brockton, Massachusetts.

Theodore Andreychuk has resigned from the staff of the VA Hospital, Downey, Illinois.

Gordon J. Barnett has resigned from the position of Clinical Psychologist, Mental Hygiene Clinic, New York.

Stanley J. Benarick has resigned from the position of Clinical Psychologist, VA Hospital, Coatesville, Pennsylvania.

Lewis Bernstein has been appointed Chief Clinical Psychologist, VA Hospital (NP Service), Denver, Colorado.

Jerome M. Brams has been appointed to the clinical psychology staff, Mental Hygiene Clinic, Indianapolis, Indiana.

Paula Brown has been appointed to the clinical psychology staff, VA Hospital, Albany, New York.

Roy Buehler has resigned from the Salt Lake City VA Hospital to accept a position in the Department of Psychology, University of Oregon.

George Bush has been appointed to the clinical psychology staff, Mental Hygiene Clinic, New York.

Joel M. Cantor has been appointed to the clinical psychology staff, VA Center (NP), Los Angeles, California.

Gertrude Harrow Clemens has resigned from the position of Clinical Psychologist, NP Hospital, VA Center, Los Angeles, California.

Robert P. Clower, Jr., a graduate of the Psychology Training Program, University of Florida, has joined the staff, VA Hospital, Oteen, North Carolina.

William H. Colley has been appointed Chief Clinical Psychologist, VA Hospital, Marion, Indiana.

Charles W. Dean has resigned from the position of Clinical Psychologist, VA Hospital (Leech Farm Road), Pittsburgh, Pennsylvania.

Harold R. Dickman, a graduate of the VA Training Program, University of Kansas, has been appointed to the clinical psychology staff, VA Hospital, Roseburg, Oregon.

Robert F. Duffey, a graduate of the VA Training Program, Catholic University, has been appointed to the clinical psychology staff, VA Hospital, Perry Point, Maryland.

Robert M. Eichler has resigned from the position of Clinical Psychologist, Mental Hygiene Clinic, New York.

Virginia Eisen has resigned from the position of Clinical Psychologist, VA Hospital, Houston, Texas.

Paul Ellen has been appointed Research Psychologist, VA Hospital, Northampton, Massachusetts.

Seymour Fisher has resigned from the position of Clinical Psychologists, Houston VA Hospital to accept a USPHS Fellow, Baylor Medical School.

Vernon Fisher has resigned from the position of Clinical Psychologist, VA Hospital, Minneapolis, Minnesota.

Arnold Freedman, a graduate of the VA Training Program, University of Illinois, has been appointed to the clinical psychology staff, VA Hospital, Pittsburgh, Pennsylvania.

Sol L. Garfield has been appointed to the position of Chief, Psychology Service, VA Hospital, Downey, Illinois.

Robert G. Gibby has transferred from the Marion VA Hospital to the position of Chief Clinical Psychologist, VA Hospital, Richmond, Virginia.

Harold T. Ginsparg has been appointed Counseling Psychologist, VA Hospital, Jefferson Barracks, Missouri.

Noel F. Grimm has been appointed to the clinical psychology staff, VA Hospital, Marion, Indiana.

Albert R. Hahn has been appointed to the position of Chief Clinical Psychologist, VA Hospital, Tucson, Arizona.

George C. Hall, a graduate of the VA Training Program, Vanderbilt University, has been appointed to the clinical psychology staff, VA Hospital, Murfreesboro, Tennessee.

William E. Harris has resigned as Chief Clinical Psychologist, VA Hospital, Richmond, Virginia.

Dale Johnson, a graduate of the VA Training Program, University of Kansas, has been appointed to the clinical psychology staff, VA Hospital, Houston, Texas.

Roy P. Johnston has been appointed to the clinical psychology staff, VA Hospital, Canandaigua, New York.

William E. Knapp has transferred from the Oakland VA Mental Hygiene Clinic to the clinical psychology staff, Mental Hygiene Clinic, San Francisco, California.

Gertrude Kurth has transferred from the Bronx VA Hospital to the clinical psychology staff, Mental Hygiene Clinic, Brooklyn, New York.

Charles V. Lair has transferred from the Tuscaloosa VA Hospital to the clinical psychology staff, VA Hospital, Augusta, Georgia.

Bernard Levine, a graduate of the VA Training Program, Boston University, has been appointed to the clinical psychology staff, VA Hospital, Bedford, Massachusetts.

Herbert Lipton has resigned from the clinical psychology staff, Bedford VA Hospital to accept a position at the Worcester State Hospital.

Franklin B. McClung has been appointed Research Psychologist, VA Hospital, San Fernando, California.

Ann G. McGuire has been appointed to the clinical psychology staff, Mental Hygiene Clinic, Denver, Colorado.

A. Mahrer has been appointed to the clinical psychology staff, VA Hospital, Denver, Colorado.

Arthur J. Marion has transferred from the Sepulveda VA Hospital to the position of Chief, Vocational Counseling Service, VA Hospital, San Fernando, California.

Manford J. Meier has resigned from the clinical psychology staff, VA Center, Wood, Wisconsin.

John F. Muldoon has resigned his position on the staff, VA Hospital, Pittsburgh, Pennsylvania.

Arthur Orzeck has transferred from the Mental Hygiene Clinic, Indianapolis VA Hospital to the clinical psychology staff, VA Hospital, Fort Lyons, Colorado.

**Donald V. Petrovich**, a graduate of the VA Training Program, Washington University, has been appointed to the clinical psychology staff, VA Hospital, Jefferson Barracks, Missouri.

**William D. Pollan** has resigned from the staff of the VA Hospital, Downey, Illinois.

**Tom B. Ray** has transferred from the Waco VA Center to the position of Chief Clinical Psychologist, VA Center, Shreveport, Louisiana.

**Margaret P. Reeves**, a graduate of the VA Training Program, University of Illinois, has been appointed to the clinical psychology staff, VA Hospital, Danville, Illinois.

**Henry D. Remple** has been appointed to the clinical psychology staff, Mental Hygiene Clinic, Kansas City, Missouri.

**Herman Rochwarg** has resigned from the staff of the Vocational Counseling Service, VA Hospital, Coatesville, Pennsylvania.

**Esther Rollins** has been appointed to the clinical psychology staff, Mental Hygiene Clinic, Philadelphia, Pennsylvania.

**David Rosenberg**, a graduate of the VA Training Program, Vanderbilt University, has been appointed to the clinical psychology staff, VA Hospital, Louisville, Kentucky.

**Fred L. Royer**, a graduate of the VA Training Program, Pennsylvania State University, has been appointed to the clinical psychology staff, VA Hospital, Perry Point, Maryland.

**Esselyn Rudikoff**, a postdoctoral trainee, University of Chicago, has been appointed to the clinical psychology staff, VA Hospital (Westside), Chicago, Illinois.

**Joseph F. Sanders** has transferred from the Bedford VA Hospital to accept the position of Chief, Vocational Counseling Service, VA Center, Togus, Maine.

**Jerold D. Scott** has resigned his position on the staff, VA Hospital, Houston, Texas.

**Helen Shimota** has resigned from the position of Clinical Psychologist, VA Hospital, St. Cloud, Minnesota.

**Edward Shulman** has resigned from the clinical psychology staff, VA Hospital, Bronx, New York.

**Jacob Sines** has resigned from the position of Clinical Psychologist, VA Hospital, St. Cloud, Minnesota.

**Leonard Solomon** has been appointed Social Psychologist, Psychology Service, VA Hospital, Montrose.

**Louis Stewart** has resigned from the position of Clinical Psychologist, San Francisco Mental Hygiene Clinic to accept a position as Research Associate in the Institute of Child Welfare, University of California.

**John W. Sutton** has transferred from the Los Angeles VA Center to the staff, VA Hospital, Washington, D. C.

**Antanas Suziedelis**, a graduate of the VA Training Program, Catholic University, has been appointed to the clinical psychology staff, Mental Hygiene Clinic, Veterans Benefits Office, Washington, D. C.

**Charles Taffel** has resigned from the position of Chief Clinical Psychologist, Mental Hygiene Clinic, Providence, Rhode Island.

**Clare Thompson** has resumed her duties as Chief Clinical Psychologist, Mental Hygiene Clinic, Oakland, California.

**John Tilton** has resigned from the position of Clinical Psychologist, VA Hospital, Battle Creek, Michigan.

**Donald T. Tomblen**, a graduate of the VA Training Program, Teachers' College, Columbia University, has been appointed to the clinical psychology staff, VA Hospital, East Orange, New Jersey.

**Richard P. Walsh**, a graduate of the VA Training Program, University of Maryland, has been appointed to the clinical psychology staff, VA Hospital, Perry Point, Maryland.

**Leon Warshaw** has transferred from the Northport VA Hospital to the clinical psychology staff, Mental Hygiene Clinic, New York.

**John E. Westeen** has transferred from the San Fernando VA Hospital to the staff, VA Hospital, Oteen, North Carolina.

**Frank Wexler** has transferred from the Montrose VA Hospital to the clinical psychology staff, Mental Hygiene Clinic, New York.

**David B. Wine** has accepted a position on the Vocational Counseling Service staff, VA Center, Los Angeles, California.

**Fred Wright** has transferred from the Chillicothe Vocational Counseling Service to the staff, VA Hospital, Tuscaloosa, Alabama.

**Jack Wanger** has been appointed to the staff of the Psychology Department at the New York Hospital, Westchester Division in White Plains, New York. He was formerly a postdoctoral clinical trainee at the Brooklyn VA Outpatient Clinic.

**Ross Stagner** has accepted a position as Professor and Chairman of the Department of Psychology at Wayne State University, Detroit. He will also head an interdepartmental committee administering a program leading to the PhD in Psychology, which includes representatives from the College of Education, the College of Medicine, the School of Business Administration, and the Department of Sociology. **Wilson McTeer**, who has been Acting Chairman, will spend a sabbatical year in research and writing at Cornell University. **Paul H. Poschel**, who has been a Public Health Service Postdoctoral Fellow at Illinois, joined the department as Assistant Professor.

**Herbert B. Weaver** has been named Director of the Psychological Research Center recently established by the University of Hawaii to conduct basic and applied research and to augment training facilities for advanced students.

**Bertram A. Weiss**, formerly in private practice, has joined the staff of the Psychology Department at Central Louisiana State Hospital in Pineville, Louisiana.



**Irving Wolf**, formerly on the clinical psychology staff at the Brockton VA Hospital, has resigned to accept a joint appointment as Assistant Psychologist at Massachusetts General Hospital and Research Associate at Harvard Medical School.

**Frederick A. Zehrer**, after duty as Chief Clinical Psychologist at Landstuhl Army Hospital in Germany, is now Chief, Clinical Psychology Service, Letterman Army Hospital, Presidio of San Francisco, California.

**Gerald H. Zuk**, formerly Senior Clinical Psychologist at Pacific State Hospital, has accepted a position in the new Mental Retardation Clinic at St. Christopher's Hospital for Children in Philadelphia.

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**Austen Riggs Center** offers a postdoctoral fellowship in clinical psychology beginning July 1958. The program will consist primarily, though not exclusively, in advanced training in diagnostic test interpretation. There will be supervision of both adult and child cases including all varieties of neurosis, character disorder, and certain types of schizophrenia, depression, etc. Additional training opportunities include lectures, seminars, staff conferences, and colloquia. For further information, write to: David Shapiro; Austen Riggs Center, Inc.; Stockbridge, Massachusetts.

The **Fulbright and Buenos Aires Convention Scholarship Programs** enable young professional persons, not now in college or university, to study abroad in 1958-59. Persons interested in these awards can receive further information by writing to the Institute of International Education (1 East 67th Street; New York 21, New York) or its regional offices for the brochure "United States Government Grants."

The **Hofheimer Prize** of \$1,500 is awarded annually by the American Psychiatric Association for an outstanding research contribution in the field of psychiatry or mental hygiene which has been published within three years of the date of the award. The competition is open to citizens of the United States and Canada not over 40 years of age at the time the article was submitted for publication, or to a group whose median ages do not exceed 40 years of age. The next award will be made at the Annual Meeting of the association in May 1958.

Articles submitted to the Prize Board before March 1, 1958 will be considered. Eight copies of each publication and data concerning age and citizenship should be sent to: John I. Nurnberger; Chairman, Hofheimer Prize Board; 1100 W. Michigan Street; Indianapolis 7, Indiana.

Two postdoctoral fellowships for advanced study in practice and research in child psychotherapy are available at the **Institute for Psychosomatic and Psychiatric Research and Training** at Michael Reese Hospital. Candidates must have a PhD in psychology or in a closely related field. The stipend, under National Institute of Mental Health (USPHS) support, is \$3,400 for the first year and \$4,000 for the second, with certain benefits in addition. A third-year appointment to enable selected fellows to pursue more fully research developed during the fellowship may be obtained. For information or application forms, write to: Sheldon J. Korchin; Director, Psychology Laboratory; Institute for Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital; Chicago 16, Illinois.

The **James McKeen Cattell Fund** invites requests for grants-in-aid in the field of applied psychology. Applications should be filed by January 15, 1958. They will be considered at the Annual Meeting of the Trustees of the fund in February. Procedural and other relevant information may be obtained by writing to: Elsie O. Bregman, Secretary-Treasurer; 425 Riverside Drive; New York 25, New York.

The **National Academy of Sciences-National Research Council** has announced that the programs of Postdoctoral Resident Research Associateships again will be offered for 1958-1959 by the Argonne National Laboratory, the National Bureau of Standards, the Naval Research Laboratory, and the Oak Ridge National Laboratory. Research facilities in visual psychophysics and engineering psychology are available. Applicants must be citizens of the United States. They also must produce evidence of training equivalent to that represented by the PhD or ScD degree and must have demonstrated superior ability for creative research. Remuneration for these associateships is \$7,035 a year. In order to be considered for awards for 1958-1959, applications must be filed on or before January 13, 1958. Awards will be announced about April 1,

1958 by the participating laboratories. Application materials may be secured by writing to: Fellowship Office, National Academy of Sciences-National Research Council; 2101 Constitution Avenue; Washington 25, D. C.

Effective July 1, 1958, a *limited* program of training grants, not previously supported by the **National Institute of Mental Health**, will be initiated. Training grant applications will be accepted for review from the following two types of programs: doctoral programs oriented to the training of research personnel in such traditional areas of psychology as personality, child, physiological, social, and experimental psychology; training programs organized around specific problem areas in mental health which are presently characterized by acute professional personnel shortages—for example, mental retardation, geriatrics, delinquency, alcoholism, psychopharmacology, school and community mental health. All applications must indicate the relevance of the training program to the field of mental health or indicate the kinds of related mental health training experiences which will be incorporated into the graduate students' program of study. Program support will be limited solely to doctoral or postdoctoral training. The type of support supplied will be similar to that which has been provided to clinical psychology training programs: teaching grants for departmental use and a limited number of traineeships for graduate students selected by the participating departments. Training grant applications will be accepted for consideration by the National Advisory Mental Health Council for the grant period beginning July 1, 1958. The closing date for filing applications is December 15, 1957. For further information and training grant application forms, write to: Chief, Training and Standards Branch; National Institute of Mental Health; National Institutes of Health; Bethesda 14, Maryland.

The National Science Foundation announces that applications are now being accepted in fellowship programs for advanced study and research in the natural sciences. Fellowships will be awarded in the mathematical, physical, medical, biological, engineering, and other sciences, including anthropology, psychology (other than clinical), geography, certain interdisciplinary fields, and areas of convergence between the natural and social sciences.

The closing dates for receipt of applications are December 23, 1957 for postdoctoral applicants, and January 3, 1958 for graduate students working towards advanced degrees in science. Selections will be announced on March 15, 1958. Applications may be obtained from: Fellowship Office, *National Academy of Sciences-National Research Council*; 2101 Constitution Avenue, N.W.; Washington 25, D. C. The closing date for receipt of applications is January 13, 1958 for the senior postdoctoral and the science faculty fellowships. Selections will be announced on March 18 and 20, 1958. Applications may be obtained from: *Division of Scientific Personnel and Education*; National Science Foundation; Washington 25, D. C.

The National Science Foundation also announces that the next closing date for receipt of research proposals in the life sciences is January 15, 1958. Proposals received prior to that date will be reviewed at the winter meetings of the foundation's advisory panels, and disposition will be made approximately four months following the closing date. Proposals received after the January 15, 1958 closing date will be reviewed following the spring closing date of May 15, 1958. Inquiries should be addressed to: *Division of Biological and Medical Sciences*, National Science Foundation; Washington 25, D. C.

The next closing date for receipt of proposals in the *Social Science Research Program* of the National Science Foundation is February 1, 1958. Proposals received by that date will be evaluated in the spring. Approved grants will be activated in time for work to begin in the summer or fall of 1958. The SSRP supports basic research in anthropology, archaeology, demography, human ecology, social geography, economics, social psychology, sociology, and the history and philosophy of science. Proposals received after February 1, 1958 will be reviewed following the fall closing date of October 1, 1958, with activation of approved grants early in 1959. Inquiries should be addressed to: National Science Foundation; Washington 25, D. C.

Internship is now available for research in clinical-social psychology at the pre- or post-doctoral level. Stipend is at the base rate of \$5,760 per year. The intern will work with the Coordinator of the **Psychiatric Evaluation Project**. Interested persons should communicate with: William E. Morris; Coordinator, Psychiatric Evaluation Proj-

ect; Veterans Administration Hospital; Salisbury, North Carolina.

Awards for study in statistics by persons whose primary field is not statistics but one of the physical, biological, or social sciences to which statistics can be applied are offered by the Department of Statistics of the University of Chicago. The awards range from \$3,600 to \$5,000 on the basis of an eleven month's residence. The closing date for application for the academic year 1958-59 is February 15, 1958. Further information may be obtained from: Department of Statistics, Eckhart Hall; University of Chicago; Chicago 37, Illinois.

The Office of Vocational Rehabilitation of the Department of Health, Education and Welfare has awarded a grant of \$75,128 to the departments of Audiology and Speech at the University of Pittsburgh. Leo G. Doerfler and Jack Matthews are the principal investigators in the project concerned with the relationships between audiologic measures and social-psychological-vocational disability.

The Des Moines Child Guidance Center will inaugurate a Day-Hospital Project under a grant from the National Institute of Mental Health. Aim of the project is: to provide an intensive therapeutic program which can reduce some of the psychological and economic difficulties involved in hospitalization; to make possible intensive diagnostic study and treatment for children with mixed disorders; to evaluate systematically the relative effectiveness of day-hospital and outpatient care for children. A brief description of the project is available by writing to: Paul R. Dingman; Director, Des Moines Child Guidance Center; 500 Garver Building; Des Moines, Iowa.

Arthur P. Coladarci has been granted a Fulbright Senior Research Scholar award to spend the current academic year at the University of Tokyo designing studies to assess the effects of the allied occupation on Japanese education.

The California State Department of Education will study problems relating to emotionally disturbed children in the state public schools. The study will include, but not necessarily be limited to: (a) determination of the criteria now being used to

identify emotionally disturbed children, (b) development of diagnostic standards, (c) evaluation of the effectiveness of present school programs for such children, (d) determination of the relationship between early identification of such children and their rehabilitation, (e) analysis of administrative and financial problems of successful programs for emotionally disturbed children. An appropriation of \$68,000 has been authorized for the first year of the study. The director of the study is Eli M. Bower.

The Illinois Department of Public Welfare has awarded Samuel J. Beck a grant of \$37,800 to continue his research on the familial environments of schizophrenic, as compared with those of well, children.

Carnegie Corporation of New York will sponsor a two-year \$100,000 study of the objectives, standards, and functions of the graduate school in the American system of higher education.

Community Rehabilitation Industries of Long Beach, California, announces the appointment of James A. Howard as supervisor of a three-year research program investigating psychological and vocational needs in the industrial retraining of hemiplegics. The project is under the directorship of Frank J. Kirkner and is to be carried on in actual industrial production conditions.

Grants made by the James McKeen Cattell Fund in 1957 were as follows:

James G. Cooper, Territorial College of Guam, \$500 for a study of the effectiveness of certain measures of ability for predicting success among the bilingual pupils of Guam.

E. E. Cureton, University of Tennessee, \$1,700 for a study of the basic attitudes and functional groups of senators in the first session of the 85th Congress as revealed by their roll-call voting behavior.

Leon Lebovitz, University of Tennessee, \$1,050 for aid in completing the evaluation of a group of nonintellectual variables, including achievement motivation, as predictors of high school achievement of graduating seniors at Oak Ridge High School.

Richard H. Dana, University of Wisconsin, \$350 for aid on a validation of the Thematic Apperception Test.

E. Jerry Phares, Kansas State College, \$650 for aid on a study of the validity of a TAT interpretation.

The Department of Psychology at Colgate University has just completed construction of a new animal laboratory for experiments in learning the-



ory to be conducted under the direction of Robert D. Myers.

Pacific State Hospital, Pomona, California, has been given \$357,610 by the National Institutes of Health to investigate the physical, behavioral, social, and cultural factors in the movement of mental defectives in and through the hospital. This five-year program is being supplemented by California State funds of approximately \$20,000 per year. Harvey F. Dingman is the Principal Investigator and Project Director. Charles Windle, formerly with the Iranian Oil Consortium, will have primary responsibility for constructing a set of experimental tests to evaluate the patients' psychological and motor abilities.

The following research grants have recently been awarded by the National Science Foundation:

**John E. Bardach**, University of Michigan, \$5,100 for one year for a study of the behavior of reef fishes.

**John A. Barlow**, Earlham College, \$8,000 for three years for studies of secondary motivation.

**Lloyd M. Beidler**, Florida State University, \$25,000 for three years for research on chemoreception.

**Paul D. Coleman**, Tufts University, \$7,500 for one year for study of auditory localization.

**Nicholas E. Collias**, Illinois College, \$1,900 for one year for study of behavior in Ploceidae.

**James A. Dinsmoor**, Indiana University, \$10,000 for two years for studies on instrumental conditioning.

**Jay M. Enoch**, Ohio State University, \$5,100 for one year for study of amblyopia and the Stiles-Crawford effect.

**Irving Y. Fishman**, Grinnell College, \$14,600 for three years for research on chemoreception.

**Donald G. Forgays and Harry Levin**, Cornell University, \$6,300 for sixteen months for research on learning as a function of stimulus change.

**David A. Grant**, University of Wisconsin, \$25,000 for three years for studies in eyelid conditioning.

**Harold Gulliksen**, Princeton University, \$40,300 for five years for research on mathematical techniques in psychology.

**Eric G. Heinemann**, Vassar College, \$12,500 for two years for study of simultaneous brightness induction in human vision.

**J. W. Kling**, Brown University, \$3,900 for one year for research on factors influencing response strength.

**Brendan A. Maher**, Northwestern University, \$5,800 for fifteen months for studies of frontal area function in lower mammals.

**Sarnoff A. Mednick**, Harvard University, \$7,100 for one year for studies in stimulus generalization.

**Charles C. Perkins and Emanuel C. Hertzler**, Kent State University, \$4,500 for one year for study of the role of reinforcement in conditioning.

**George M. Peterson**, University of New Mexico, \$13,400 for two years for studies on the neurophysiology of behavior.

**T. C. Schneirla**, American Museum of Natural History, \$16,900 for three years for study of the biological basis of behavior in *Neivamyrmex*.

**William N. Schoenfeld and William W. Cumming**, Columbia University, \$21,500 for two years for research on schedules of reinforcement.

**Paul F. Secord**, University of Nevada, \$6,800 for two years for research and training in experimental psychology.

**Carl E. Sherrick**, Washington University, \$10,500 for two and one-half years for study of the psychophysical parameters of vibratory perception.

**B. F. Skinner**, Harvard University, \$45,300 for two years for research on reinforcement schedules.

**William M. Smith**, Princeton University, \$7,700 for one year for research on visual contour processes.

**Roger W. Sperry**, California Institute of Technology, \$72,600 for three years for research on neural mechanisms of behavior.

**Lawrence Stark**, Yale University, \$16,800 for three years for research on servo-analysis of the pupillary reflex.

**William R. Thompson**, Wesleyan University, \$9,400 for two years for a study of the influence of stress on behavior.

**Willard R. Thurlow**, University of Wisconsin, \$17,700 for three years for studies of auditory pattern formation.

The National Institutes of Health has approved a five-year grant totaling \$125,000 to the League School for Seriously Disturbed Children. The specific aim of the grant is to establish a demonstration nursery school for schizophrenic children as part of an existing day care center for such children. The nursery school will be utilized to determine which types of mentally ill children, aged 3 to 6, can remain at home and be helped in a non-residential setting. Among those working on the project will be Zelda Klapper, clinical and research psychologist.

A grant from the Smith, Kline & French Foundation to the Institute of the Pennsylvania Hospital, Philadelphia, made possible a study of children at The Training School, Vineland, New Jersey, which involved use of an operant conditioning technique developed by David B. Maline and E. J. Green. Donald H. Bullock and Norma Wohl sponsored the research fellowship.

Grants administered through the National Institutes of Health will support studies by the research division of the Columbus Psychiatric Institute on prenatal precursors of neuropsychiatric disorder, biosynthesis of neuraminic acid, aging, drug effects

on normal individuals, development of primate behavior, infantile experience, effects of brain damage, and vector and topographic electroencephalography.

The Office of Vocational Rehabilitation has announced the award of \$1,370,939 for training grants in the field of **rehabilitation counseling** to cover part of the cost of 35 teaching grants and 501 traineeships. The following institutions and agencies have received grants in support of basic professional training or specialized programs: Boston University, Springfield College, University of Buffalo, Teachers College at Columbia University, Hunter College, New York University, Pennsylvania State University, George Washington University, North Carolina State College, Richmond Professional Institute, West Virginia University, University of Florida, Vanderbilt University, University of Illinois, Michigan State University, Ohio State University, Southern Illinois University, Wayne State University, State University of Iowa, University of Kansas, University of Minnesota, University of Missouri, University of Arkansas, University of Houston, Texas Technological College, University of Colorado, University of Utah, San Francisco State College, University of California (Los Angeles), University of Oregon, Arkansas and New York Divisions of Vocational Rehabilitation, Brooklyn Industrial Home for the Blind, Gallaudet College, and the Cleveland Vocational Guidance and Rehabilitation Services.

The Joint Commission on Mental Illness and Health received a \$60,000 grant from the Rockefeller Brothers Fund to further the commission's three-year survey of the nation's mental health needs and resources. The contribution will be used to assist in financing a study of the role of religion in mental health.

The Foundation for Research on Human Behavior has made a grant of \$15,640 to the Occupational Research Center at Purdue University to study the effects of **role-playing experience** on expressed leadership behavior. The general objective of the research project is to investigate the role-playing technique as a human relations training device. C. H. Lawshe, Professor of Psychology, will serve as Principal Investigator.

I am preparing a paper on the need and techniques for handling a large number of variables in psycho-

logical experiments in which the analysis of variance type of design is used. In a survey of recent issues of psychological journals, I found only *one* study in which at least 5 factors were varied systematically in a factorial design. The median number of factors varied in the experiments was 3. Considering the complexity of human behavior, this hardly appears adequate if we ever hope to develop broad principles of behavior for prediction purposes. *I would appreciate receiving from researchers references or reprints of psychological experiments* in which 4 or more factors (excluding subjects, but not subject variables) have been varied and tested in a factorial analysis of variance design. Related papers or comments on the problem are welcomed. Please write to: Charles W. Simon; Cockpit Research and Development Section, Hughes Aircraft Company; Culver City, California.

A clearinghouse of information on **psychopharmacology** is being established by the Psychopharmacology Service Center of NIMH. An extensive collection of the literature in this field—including pharmacological, clinical, behavioral, and experimental studies of the ataraxic, psychotomimetic, and other centrally acting drugs—will be classified and coded to enable the staff to answer a wide variety of technical and scientific questions. As soon as enough materials have been assembled, the PSC plans to offer bibliographic and reference service as well as the preparation of critical and analytic reviews of special topics in the field. In order to accelerate the growth of the literature collection, *PSC invites persons working in this field to provide three copies of any papers* that deal with their work—whether reprints, prepublication manuscripts, progress reports, informal mimeographed reports, papers read at meetings, or abstracts. Letters outlining work in progress would also be welcome. Any restrictions that authors may wish to place on the use of their papers will be strictly observed. All materials should be addressed to: Technical Information Unit, Psychopharmacology Service Center; National Institute of Mental Health; 8719 Colesville Road; Silver Spring, Maryland.

The research group of the Psychiatry Service, Boston City Hospital is engaged in a study of **sensory deprivation**. *We would very much like to hear from anyone else doing work in this area.* Please write to: Philip Solomon, Physician-in-Chief; Psychiatry Service, Boston City Hospital; Boston, Massachusetts.

National Science Foundation publications are available to all scientists who have need for them. Lists of publications are available from the foundation. Requests should be addressed to:

Publications Office, National Science Foundation; Washington 25, D. C.

The "Morning Notes" of Adelbert Ames, Jr., have been especially typed, assembled, and indexed in three copies. The original ribbon copy is being housed in the Baker Library at Dartmouth College. A carbon of the notes is deposited in the Firestone Library of Princeton University; another carbon has been sent to Ames' son. An unbound set of the notes, beginning with those of 1946, is in the possession of Hadley Cantril (Princeton, New Jersey) who sponsored the compiling and deposition of the notes. The notes begin with the phase of Ames' thinking after he turned to the psychology of visual perception with all the ramifications he saw this subject had relevant to the nature and range of human experience.

An eight-week conference and work session sponsored by the **Behavioral Sciences Division**, Air Force Office of Scientific Research, was held this summer at the University of New Mexico (Albuquerque, New Mexico). Participants were from the fields of psychology, sociology, anthropology, philosophy, economics, psychiatry, personnel administration, biochemistry, and mathematics. The conference was under the direction of Ralph D. Norman and Paul Walter, Jr.

The second **Annual Conference of the American Academy of Psychotherapists** was held in New York City. The general theme was: The Place of Values in the Practice of Psychotherapy. For further information, write to: George Dolger; 11 Riverside Drive; New York 23, New York.

The tenth **Annual Meeting of the Gerontological Society, Inc.** was held in Cleveland, Ohio. The general theme was: Assessment or Measurement of Factors Influencing Aging and Programs for Their Control. The Program Chairman was James E. Birren; National Institute of Mental Health; Bethesda, Maryland.

Dunlap and Associates, Inc., held the fourth meeting of its **Management Research Forum**. The four topics to date have been: Economic Decision Theory, Feedback Models in Behavioral Research, The Role of Mathematical Models, and An Inventory Problem and a Solution. Topics contemplated for future meetings include determination of a spare parts package, equipment replacement policies, and theories of organization. For further in-

formation, write to: Robert J. Schreiber; Dunlap and Associates, Inc.; Stamford, Connecticut.

The University of Wisconsin departments of education and psychology and the Wisconsin Association of School Psychologists sponsored an institute this summer for those professionally interested in **psychological services in public schools**.

Anna Freud lectured on adolescence in a two-day symposium on child psychology at the Child Guidance Association, Worcester, Massachusetts.

Louisiana State University has completed its 1956-57 lecture series on **Current Concepts in Psychology**. For further information, write to: Irwin A. Berg; Louisiana State University; Baton Rouge 3, Louisiana.

The first of a series of postdoctoral seminars sponsored by the School of Education, University of California, Berkeley, was held this summer under the leadership of Ernest R. Hilgard. Discussion centered around recent developments within contemporary theories of learning and around the relationship of traditional learning theory to practical school problems.

The effects of music on the human being was the subject of a symposium recently held at the New York Academy of Sciences.

A three-day workshop was recently held in Denver on the problems of developing mental health services in the state school system. For further information, write to: Jerome Levy; Assistant Director, Mental Health Division; Colorado State Department of Public Health; Denver 2, Colorado.

The eighth **Annual Conference of the Southern College Personnel Association** will be held November 17-19 at Miami Beach, Florida. For further information, write to: E. J. Brumfield; Alabama Polytechnic Institute; Auburn, Alabama.

The 1958 **Western Joint Computer Conference** will be held at the Ambassador Hotel in Los Angeles May 6-9. Original papers on subjects pertinent to computer design and application are invited for presentation during the conference. Titles and 200-word abstracts should be submitted before January 15, 1958 to: Technical Program Chairman, Western Joint Computer Conference; P.O. Box 213; Claremont, California.

The **Psychoanalytic Psychology Study Group** in Chicago announces a third year of courses in the advanced study of psychoanalytic theory. Further



information may be obtained from: Helen Sunukjian; Chicago Mental Health Center; 2449 W. Washington; Chicago, Illinois.

The next **Annual Reading Institute** at Temple University will be held in Philadelphia January 27-31, 1958. Further information may be obtained by writing to: The Reading Clinic; Department of Psychology, Temple University; Philadelphia 22, Pennsylvania.

The **Eastern Group Psychotherapy Society** is sponsoring a series of lectures on "Reason and Unreason in Psychotherapy" and on sources of conflict in contemporary group psychotherapy. For further information, write to: Harold Leopold; 2 East 86 Street; New York, New York.

The fourth **Annual Western Regional Meeting of the American Group Psychotherapy Association** will be held in Los Angeles November 19-20, 1957. For information, write to: Richard Sears; 49 Fourth Street; San Francisco, California.

At its weekly meetings, the **Association for the Scientific Study of Psychotherapy** has been putting into operation ideas presented in the article, "Beyond Law and Ethics: A Proposal for Collaboration in Psychological Practice" (*Amer. Psychologist* 1957, 12, 267-272). For further information, write to: Walter Myden; One Fifth Avenue; New York 3, New York.

The **Massachusetts Department of Mental Health, Division of Mental Hygiene** (15 Ashburton Place, Boston 8, Massachusetts) announces the formation of the **Western Massachusetts Mental Health Training Program** for the training of clinical psychologists, psychiatric social workers, school psychologists, school social workers, and public health nurses.

The fourth annual **Seminar on Psychology in Industrial Management** is being conducted during the first semester at Purdue University by the Occupational Research Center staff.

## Convention Calendar

**American Psychological Association:** August 28-September 3, 1958; Washington, D. C.

*For information, write to:*

Roderick H. Bare  
American Psychological Association  
1333 Sixteenth Street, N.W.  
Washington 6, D. C.

**Southwestern Psychological Association:** April 3-5, 1958; Austin, Texas

*For information, write to:*

Ruth M. Hubbard  
Veterans Administration Hospital  
Waco, Texas

**Eastern Psychological Association:** April 11-12, 1958; Philadelphia, Pennsylvania

*For information, write to:*

Gorham Lane  
Department of Psychology  
University of Delaware  
Newark, Delaware

**Western Psychological Association:** April 24-26, 1958; Monterey, California

*For information, write to:*

David L. Cole  
Department of Psychology  
Occidental College  
Los Angeles 41, California

**Southeastern Psychological Association:** April 27-29, 1958; Atlanta, Georgia

*For information, write to:*

M. C. Langhorne  
Box 2  
Emory University, Georgia

**National Association for Mental Health:** November 20-24, 1957; Atlantic City, New Jersey

*For information, write to:*

National Association for Mental Health  
10 Columbus Circle  
New York 19, New York

**American Association for the Advancement of Science:** December 26-30, 1957; Indianapolis, Indiana

*For information, write to:*

Raymond L. Taylor  
American Association for the Advancement of Science  
1515 Massachusetts Avenue, N.W.  
Washington 6, D. C.

**American Group Psychotherapy Association:** January 22-25, 1958; New York, New York

*For information, write to:*

Milton Berger  
50 East 72 Street  
New York 21, New York

**International Association of Applied Psychology:** April 9-14, 1958; Rome, Italy

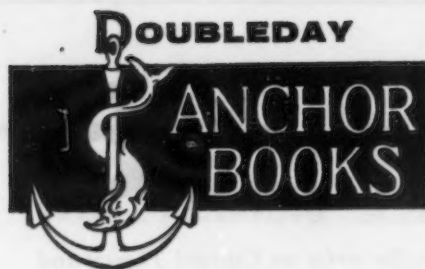
*For information, write to:*

Segreteria  
XIII Congresso Internazionale di Psicologia Applicata  
Istituto Nazionale di Psicologia del C.N.R.  
Piazzale delle Scienze 7  
Roma, Italia

**World Federation for Mental Health:** August 24-29, 1958; Vienna, Austria

*For information, write to:*

Secretary-General  
World Federation for Mental Health  
19 Manchester Street  
London, W.1, England



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Edited by F. V. SMITH  
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Durham*

The policy followed by the Editor, Professor F. V. Smith, of the Department of Psychology, has been to preserve a balance between the various fields of research in education. Articles have appeared on such diverse topics as the history of education with a particular emphasis upon education in the North Country, the teaching of modern languages, encephalography in the study of children, cybernetics, education measurement, auditory high-frequency weakness among school-children and projective tests.

The submission of articles is not restricted to members of the University; but in the main the RESEARCH REVIEW reports work done in or in association with the University of Durham.

*The REVIEW is published by the Institute, and can be obtained for 5s. 6d. post free, from the Director, Institute of Education, Keping Terrace, Gilesgate, Durham, England, or through booksellers.*

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5

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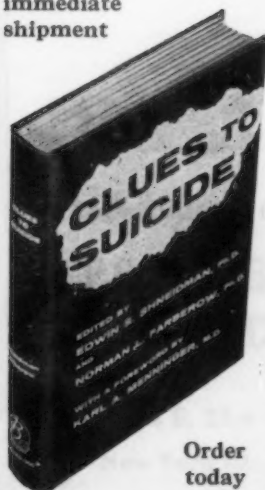
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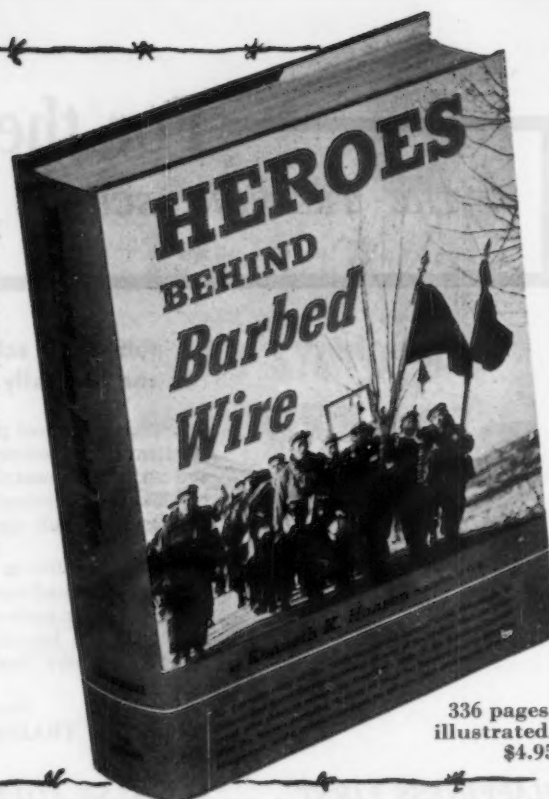
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